

A need analysis of the high-frequency words (HFW) dictionary for the Indonesian language for foreigners (ILF)-1 learning

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ABSTRACT: This is a preliminary study of research development for creating a dictionary of high-frequency words (HFW). Thus, this study tries to analyze the need of the ILF learners as the users of a dictionary of HFW for their ILF learning. A list of high-frequency words should be used in ILF learning so that the learning objectives can be achieved effectively. Unfortunately, the word list is not yet available. The ILF learners, especially those at the beginner level, still have difficulty using the Great Dictionary of the Indonesian Language (KBBI). They prefer using translation apps to obtain the meaning of a word, even though these apps do not always help. Employing a descriptive survey, this study involved a total of 183 ILF teachers and learners. The data were gathered through Google-form questionnaires. In addition, interviews were administered with selected ILF teachers who had a teaching experience of more than 15 years. The findings revealed that the teachers and learners had different beliefs on the vocabulary forms needed for making a dictionary of HFW. The learners still did not understand the concepts of high-frequency words. According to the teachers, HFW was more needed for ILF learning. Meanwhile, for the learners, general words were more needed. Besides, digital dictionaries were more in demand than printed dictionaries. Bilingual dictionaries were more needed than monolingual dictionaries. Both the teachers and learners believed that the dictionary of HFW should comprise sentence examples. They both agreed that the dictionary of HFW should provide information about the use of words in sentence examples, affixes, synonymous phrases, antonyms, word classes, and phonetics. Therefore, the results of this research analysis can be used as a basis for developing a dictionary that fits the needs of ILF-1 learners.

KEYWORDS: need analysis; dictionary; high-frequency words; ILF-1 learning

1. Introduction

Dictionaries are an important resource for enhancing the vocabulary knowledge of foreign language learners. Foreign language learners can learn vocabulary independently using an effective dictionary. In learning a foreign language, learners commonly open a dictionary to recognize the meaning of words, how to pronounce and spell words, and how to use words in sentences. Dictionaries help learners understand words and facilitate them in honing their language skills.

Dictionaries are of several types. Dictionaries based on size are divided into three types: pocket dictionaries, abridged dictionaries, and concise dictionaries (Hartmann and James, 1998). Based on the language composition, Atkins and Rundell (2008) divide dictionaries into three types, namely monolingual, bilingual, and multilingual dictionaries. Monolingual dictionaries consist of only one language, such as the Oxford Advanced Learner and Great Dictionary of the Indonesian Language (KBBI). Monolingual dictionaries are developed for L1 learners. Meanwhile, bilingual dictionaries consist of two languages: Indonesian-English, English-Japanese, and vice versa. Multilingual dictionaries are composed of three or more languages, such as Indonesian-English-Japanese. Both bilingual and multilingual dictionaries are intended for foreign language learners.

Dictionaries have experienced development from time to time. Lexicographers as an authority responsible for the preparation of dictionaries recognize the important role of dictionary research (Hartmann and James, 1998). Before developing dictionaries, lexicographers conduct preliminary studies to adjust to the rapid technological advances, the changing format of the dictionary from print to the digital version, and the increasing need for fast access. Such effort serves as a basis for making dictionaries that suit the current needs of dictionary users.

Due to the effectiveness and efficiency factors, the changing of times has shifted the role of printed to digital dictionaries. Digital dictionaries provide more advantages than printed dictionaries in terms of form, content, and method of storing (De Schryver, 2003). Foreign language learners prefer to use digital dictionaries because word searches can be done more easily (Liu et al., 2014). The Web-based lexicographic media including online monolingual and bilingual dictionaries, thesaurus, concordance, and Google search engine are increasingly used in foreign language learning (Liu et al., 2021). The results of studies conducted at several universities in Japan show that foreign language learners spend 15% of their writing assignment time consulting digital dictionaries (Ganem-Gutierrez and Gilmore, 2021). Learners use the media to help them complete their writing assignments. Digital dictionaries are used to assist in academic writing, such as correcting errors and doing revisions.

Dictionaries are also developed not only for language learning but also for other purposes. Dictionaries can function as a bridge between different languages and cultures. For instance, the Lobscheid dictionary, a Chinese-English dictionary developed by German missionaries and published in Hong Kong, serves as a bridge between Europe and China. The dictionary shows the importance of China's political modernization in the late 19th and early 20th centuries (Tsz, 2017). Dictionaries can also function as a device for language maintenance and preservation (Ariyani et al., 2022). In the study, an Android-based dictionary application is developed based on data on the Lampung language. Such effort is expected to contribute to the maintenance and preservation of that language. The studies above show that the development of dictionaries is not only beneficial for language learning but also for language preservation and cultural introduction.

Dictionaries tend to be a preferred tool for language learners when looking up word meanings and word usage in sentences. In the context of foreign language learning, a list of words as the content of a dictionary is an important part. The teaching of foreign languages can be done through a repetition strategy by prioritizing high-frequency words (Johns and Wilke, 2018). The use of the HFW approach for learning English in Japan has shown significant success (Anthony, 2012). HFW help learners recognize grammatical categorization while learning word pronunciation (Frost et al., 2019). Words used repeatedly help learners master the language they are learning (Nordlund, 2016). These studies lead to the conclusion that a dictionary containing high-frequency words is necessary and more useful than a dictionary containing low-frequency words.

Studies on HFW have been conducted since the mid of 1953. The best-known study of HFW was Michael West's General Service List (GSL). However, three notable lists of HFW developed in recent years include the British National Corpus (BNC), the British National Corpus/Corpus of Contemporary American English (BNC/COCA), and the New-General Service list (new-GSL) (Dang et al., 2020).

Before highlighting the research gap in this study, strong arguments about the importance of HFW for foreign language learning should be delivered. The definition of HFW and the difference between HFW and AFW and LFW should also be properly identified.

HFW is a group of words used most often in a particular field. For instance, HFW in the field of medicine is the word used most often in the field of medicine. HFW in agriculture is the word used most frequently in agriculture. Thus, there are HFWs in other fields, such as technology, midwifery, and education. Meanwhile, low-frequency words (LFW) are words with a very low level of occurrence. Nation (2001) divides English vocabulary into four types, namely high-frequency words (HFW), academic words (AW), technical words (TW), and low-frequency words (LFW).

In this regard, dictionaries for ILF learning are still very limited. The authors only managed to find one dictionary developed for ILF learning, with an English speaker background (Quinn and Kozok, 2001). Studies have investigated the development of audio dictionaries for ILF learning (Sa'diyah, 2020) and the development of idiom dictionaries (Melati, 2017). However, the corpus built still only comes from a book, namely *My Best Friend Indonesia* (Fadly, 2018). Therefore, it is necessary to build a corpus using data appropriate to ILF learning, as a basis for developing a dictionary for ILF learning. The appropriate research development should be conducted to produce a quality dictionary that can be used massively, not only for limited needs.

Based on a scrutiny of relevant studies, a dictionary of high-frequency Indonesian words is not yet available. The author only found a book containing a list of high-frequency Indonesian words with the Kompas corpus in 1994 (Muhadjir et al., 1996). Those data are not relevant as the dictionary content in ILF learning, especially at the beginner level. HFW dictionaries that can be used for ILF learning purposes are not yet available.

Therefore, due to the current unavailability of a dictionary of HFW for ILF learning, the development of a dictionary that addresses such needs is pivotal. As a part of a larger project in developing a dictionary of HFW for ILF learning, this preliminary study tries to address this lacuna by answering the following research questions: (1) What forms of words are needed in a dictionary for ILF learners? (2) What are the aspects to consider in developing a dictionary for ILF learners? This study focuses on needs analysis for developing a dictionary containing high-frequency words for ILF-1 learning. It is important because high-frequency Indonesian words for ILF-1 learning are not yet available. Many studies state that the use of HFW has a positive impact on foreign language learning.

2. Materials and methods

This was a preliminary study of the dictionary development for ILF learning. The ADDIE model was employed in this research development. This study aimed at scrutinizing the need analysis of the high-frequency words (HFW) dictionary for the Indonesian language for foreigners (ILF)-1 learning. The results of the research can be used as a basis for developing the dictionary of HFW suitable for ILF learning.

2.1. Participants

The need analysis of a dictionary for ILF learners was carried out to find out the aspects to consider when developing a dictionary. The respondents to this study were ILF learners and teachers. The opinion of ILF teachers concerning the appropriate dictionaries for ILF learners was considered important. In addition to possessing adequate knowledge of the needs of their learners, the ILF teachers served as evaluators, motivators, and guides of ILF learning. In addition, the perspectives of the ILF teachers were needed to shed light on their teaching experiences, as well as the needs of their learners concerning a dictionary of HFW.

2.2. Data collection and methods of data analysis

The data in this study were collected from 181 respondents. They were 83 ILF teachers (46%) and 98 ILF learners (54%). The majority of teacher respondents came from Indonesia (95.18%), Saudi Arabia (3.61%), and Cambodia (1.20%). Meanwhile, the majority of learner respondents came from Thailand (49%), followed by Australia (8%), Japan (7%), and the Philippines (6%). The majority of the ILF teachers were native Indonesian speakers, whereas the ILF learners came from various countries. The ILF teachers were mostly native Indonesian speakers. Of the 83 teacher respondents, there were only four teacher respondents who did not come from Indonesia. They were three teachers from Saudi Arabia and one teacher from Cambodia.

They responded to the questionnaires and spread the Google form. The questionnaires were distributed for one month to the teachers via the WhatsApp group of ILF teachers, consisting of 167 ILF teachers from various countries. There were 83 teachers (50%) willing to fill in the questionnaires. The WA group consisted of ILF teachers from various countries. It was a semi-official forum for teachers to share information related to their ILF teaching activities. The teachers were also requested to distribute the questionnaires to their learners.

2.3. Research instruments

Both closed and open questionnaires were used to dig up the information about the dictionaries needed in ILF learning. The questionnaire was divided into three parts: (1) the information on the respondent's data including name, country of origin, language spoken, age, gender, last education, place, and purpose of the study; (2) the information on the learning needs of Indonesian words and the respondents' knowledge about HFW; (3) the information on the content for developing the dictionary, such as the function, type, size, and media. The questionnaires for teachers and learners had similarities in content. However, the questionnaires for learners used two languages, namely English and Indonesian.

To maintain its validity, the questionnaire was validated by expert judgment, namely two ILF experts and one dictionary expert. The input from the experts was used to revise the questionnaire. Furthermore, the questionnaire was distributed in the ILF teacher's WA group. In addition, the researchers also conducted interviews with two senior ILF teachers who had more than 15 years of experience in ILF teaching. They were also lecturers of ILF from reputable universities in Indonesia, including Yogyakarta State University and the University of Indonesia. Employing qualitative research with descriptive statistical methods, the data were analyzed using both descriptive-qualitative and descriptive-quantitative analysis. As many as 10 questions were asked regarding the need for dictionaries in the ILF learning process. The interview data were analyzed using qualitative data analysis, by making interview transcripts, reading the results of the transcripts then coding or indexing the parts that became findings, categorizing findings, and making explanations for each of these categories.

3. Findings and discussion

From the survey results, it was known that both teachers (98%) and learners (93%) needed a dictionary for foreign language learning. Only 9 out of 181 respondents said they did not need a dictionary. The respondents did not explain the reasons why such a dictionary was not needed. The teachers and learners had different beliefs on words needed for ILF learning. According to the teachers, ILF learners needed more HFW for their ILF learning, than general or basic words. Meanwhile, according to the learners, they needed more general words than HFW.

In terms of language, the dictionary needed by the learners was a bilingual dictionary. Despite the popularity of a digital dictionary both offline and online, the learners stated that they still needed a dictionary in printed form. Meanwhile, the purpose of using the dictionary was to find the meaning of words and find ways to use words. Therefore, the learners needed examples of the use of words in sentences, word formation in phrases, forms of affixes, pronunciation, synonyms, antonyms, and word classes.

3.1. Words preferences for ILF-1 learning

According to the learners, general vocabulary (78%) was more necessary than basic words (66%) and HFW (65%). In contrast, ILF teachers stated that the most needed words were HFW (85%), followed by general words (76%) and basic words (75%). The results can be seen in the **Figure 1** below:

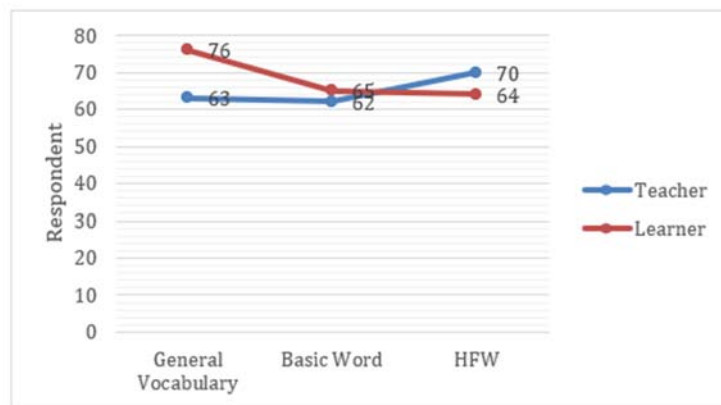


Figure 1. Word preferences.

Reinforcing the above data, the results of the interviews with two senior ILF teachers revealed that ILF learners needed the dictionary of HFW. Unfortunately, the dictionary did not exist yet.

“Yes, if there is a high-frequency words dictionary, I think it will help the process of learning Indonesian. Unfortunately, so far there is none. All teachers are busy teaching, no one has thought to start creating it”.

The respondents answered the open questions variedly. In their eyes, HFW were words difficult to understand, words that had many meanings, academic words, everyday words, and productive words. Some teacher respondents were still not familiar with the concept of HFW. Meanwhile, teacher respondents who had sufficient knowledge about HFW preferred to teach the words. The respondents recognized that HFW were words that appeared repeatedly and more often than other words. High-frequency words were a group of words used most frequently in a particular field, such as medicine, agriculture, and children.

According to the respondents, a dictionary containing HFW for the beginner level was very important. In foreign language learning, such as English, Mandarin, French, and Chinese, the use of

HFW has a positive impact. It makes it easier for learners to learn a language (Jendrych, 2013). It also allows them to learn with repetition methods (Johns and Wilke, 2018). Learning HFW also allows learners to improve their pronunciation and enjoy interactive and fun activities (Coyle, 2013). It is shown that words with an occurrence rate of 10 times are more memorable than words that appear 5 times (Gutierrez et al., 2019). Cultivating HFW in language classrooms also supports successful language learning. According to Webb and Nation (2012), language teachers need to decide what words they need to focus on and how those words can be taught effectively. Words that occur more often tend to be memorized more strongly than words that occur less often. Words that often appear are more frequently needed for communication. For instance, the words “find”, “flower”, and “food” will be more useful to know than the words “fluctuate”, “foam”, or “flume”.

Based on the literature review, no dictionary of HFW Indonesian words can be used for ILF learning, especially at the beginner level. Expatriate ILF learners who have limited time to study need a dictionary of HFW for ILF learning. It is in line with the results of studies that highlight the positive impact of using HFW in foreign language learning (Brysbaert et al., 2018; Frost et al., 2019; Johns and Wilke, 2018). Teachers must make a list of HFW according to their needs, such as HFW for academic needs (Coxhead, 2000) and HFW for English suffixes (Suhandoko and Ningrum, 2020).

The dictionary of HFW can assist the learners’ learning more effectively. Therefore, it is necessary to carry out a needs analysis as a basis for developing a dictionary containing Indonesian HFW for ILF learning. Teaching vocabulary and understanding word meaning can be done by introducing words, practicing using words, developing words through games, and using dictionaries (Harmer, 2007). Fun learning activities can also help learners unconsciously acquire L2 (Pamuji et al., 2019). The use of a dictionary that contains HFW will be enjoyable for beginner learners because the words provided are commonly heard words. Learners do not need to open KBBI which contains words rarely used and difficult to understand. Opening such a dictionary becomes a frustrating activity, especially for learners of ILF at the beginner level.

3.2. Dictionary needed by ILF learners

3.2.1. Bilingual dictionary: Indonesian-learner’s L1

A dictionary needed by the ILF learners is a bilingual dictionary, namely Indonesian-learners’ L1, Indonesian-English, English-Indonesian, and learners’ L1–Indonesian. The dictionary types needed by the ILF learners can be seen in the **Figure 2** below:

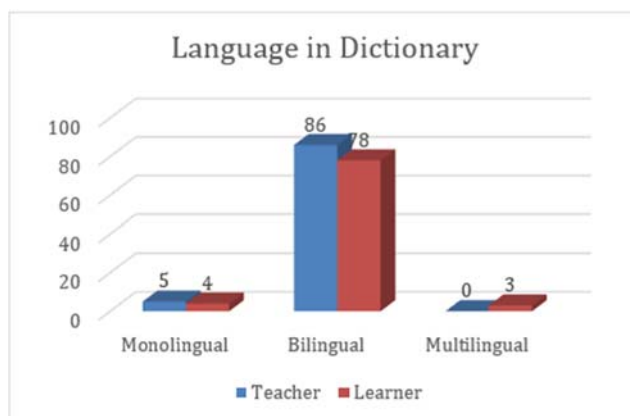


Figure 2. Dictionary types.

ILF learners are generally adult learners who have already mastered English and/or their L1. ILF learners learn by using texts and practice to produce texts in the Indonesian language. According to the interviews with one of the respondents, ILF learners need an Indonesian dictionary with a translation of the learners' language. It is because the main purpose of using a dictionary is to understand the meaning of the word being learned.

“Those who like to use their dictionary are learners from China, Thailand, and Singapore. They use their dictionary. Some use electronics, but some are in the form of really thick books”.

He states that the existing dictionaries are not sufficient, especially for novice ILF learners. Beginner ILF learners need a dictionary that adjusts to their needs. Beginner ILF learners need to start with survival language, and then a daily language for communication in their surroundings. The dictionary should not only introduce the meaning but also the context. Context becomes important in understanding meaning. The respondents also state that the currently available dictionaries are not suitable for ILF learners because these dictionaries do not provide context. Learners have not been able to determine the appropriate meaning of the several meanings offered in the dictionary. Dictionaries more useful for ILF learners are those arranged per theme and those that provide contexts.

Dictionaries are categorized into three types monolingual, bilingual, and multilingual. Monolingual dictionaries can be used for producing and receiving texts using the user's language. Meanwhile, bilingual dictionaries are more relevant for the text not mastered by the users. The use of bilingual dictionaries for young adult foreign language learners is proven to have a positive impact on short-term memory (Martinez and Singleton, 2019). Bilingual dictionaries are not used only to see the meaning of words but also to see how words are used in sentences (Ishikawa, 2019).

Dictionaries can help learners understand words (Harmer, 2007). Dictionaries for certain needs are very limited (Vaupot, 2021). Therefore, Vaupot recommends the development of a bilingual dictionary for foreign language learning by using certain applications. It allows learners to find linguistic constructions similar to the source language and target language being studied and acquire skills in translation, terminology, and discourse phraseology. In addition to producing dictionaries, learners also benefit from linguistic knowledge (lexical, semantic, grammar). The use of dictionaries has the potential to provide independent learning opportunities that can improve reading, spelling, and phonology skills (Ezeh et al., 2022). Dictionaries can help learners enrich their vocabulary. The frequency of using dictionaries is also correlated with spelling skills. Thus, dictionaries as a learning medium are needed by foreign language learners.

3.2.2. Digital dictionary

The data show that teachers (47%) and learners (41%) prefer to use both online and offline digital dictionaries. Printed dictionaries seem to have been abandoned by teachers and are still of little interest to learners. Along with the development of the times, dictionary media has also developed. Dictionaries are no longer only in printed versions but in the digital version engaging the current electronic media. The use of digital dictionaries is believed to improve the language skills of dictionary users (Rahimi and Miri, 2014). The use of dictionary applications on mobile phones can increase learning motivation and reduce anxiety. Due to its practicality (Pamuji and Setyarini, 2020), the current technology such as mobile dictionaries is beneficial for language learning outside the classroom. It can be used at any time, whether at home or while traveling.

The search engine technology allows dictionary users to type the word they want in the search field. The word will then appear quickly. The dictionary users do not need to look up words based on

alphabetical order. In addition, there is no need to know the root of a word. The digital dictionary also provides the audio of word pronunciation by just clicking without reading phonetic transcriptions. Digital dictionaries can be used on mobile phones, laptops, or tablets so that they can be carried easily.

Offline digital dictionaries that the teachers are most interested in are Android mobile apps (73%). Meanwhile, the learners are more interested in iOS mobile apps (41%) and Android (25%). The selection of these apps can be influenced by the popularity of certain types of mobile phones in a country. Since Android is more popular in Indonesia, the teachers recommend the development of an offline digital dictionary based on Android, not iOS. It is because the majority of ILF teachers come from Indonesia. Meanwhile, for online digital dictionaries, the teachers prefer Android mobile apps and web apps. ILF learners are interested in using iOS mobile apps (34%), Android (29%), and web apps (26%). The **Figure 3** below shows the dictionary media chosen by the ILF teachers and learners.

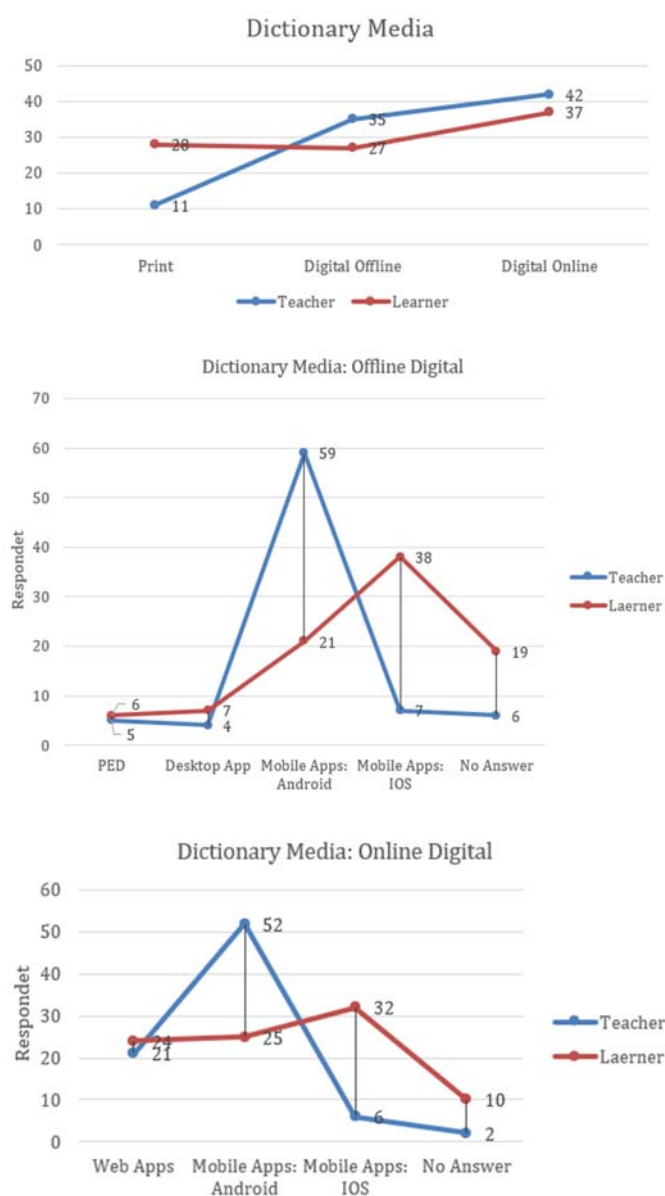


Figure 3. Dictionary media.

The reason why digital dictionaries are preferred is the ease of operation. Digital dictionaries are

easy to use and contain updated data. Studies also show that online dictionaries enrich the vocabulary and pronunciation skills of dictionary users. For instance, the Cambridge online dictionary offers the convenience of learning English, especially in phonology and vocabulary enrichment (Ambarwati and Mandasari, 2020).

In today's society that depends on electronic information networks and the internet, the development of digital technology has replaced print media. As explained by AK and ECW, most of their learners currently use digital dictionaries for their learning.

3.2.3. Content of a dictionary

According to the teachers (98%) and learners (93%), the most needed dictionary is the one equipped with examples of sentences. It is reinforced by the statement of one respondent in the interviews. The dictionary is expected to provide sentences that are often used in everyday life.

"...supposedly, the dictionary shows how the word is used in a sentence. These sentences should not be formal sentences that are rarely heard. It would be interesting if the sentence is a sentence that we usually hear in everyday life. Of course, in large numbers, so that learners can see how the word is used".

The data show that the examples of passive and active sentences are also beneficial in their learning. According to the teachers, there is a need for including examples of active (61%) and passive (60%) sentences in a dictionary. Meanwhile, the need for active or passive sentences for learners is quite lower. The majority of the teachers (75%) state that the use of affixes in the dictionary is necessary. The dictionary size and content needed by the ILF teachers and learners can be seen in the **Figure 4** below:

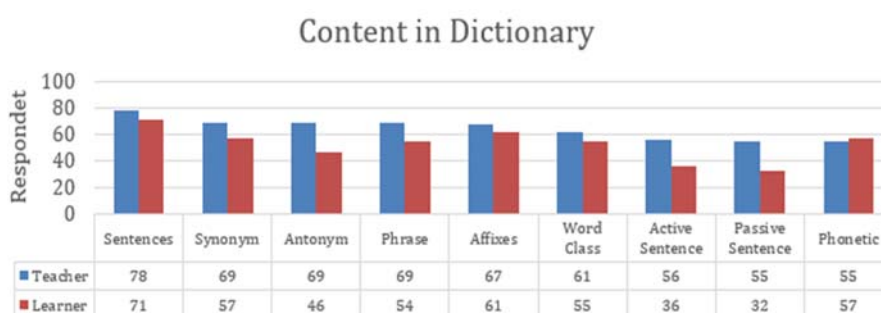


Figure 4. Dictionary size and content.

The teacher and learner respondents agree that the dictionary should contain examples of sentences, affixes, phrases, synonyms, phonetics, word classes, and antonyms. Since ILF learners are adults, the dictionary does not need to be accompanied by pictures. Dictionaries are needed for the development of vocabulary knowledge. The dictionary can explain in detail word classes, definitions, phrase forms, and how these words are used. Dictionaries can be used as learning media for practicing language awareness. In other words, dictionaries provide great benefits for language learners.

However, there are special characteristics that make it difficult for learners to learn the language. One distinctive characteristic of the Indonesian language is the concept of affixation which often makes ILF learners difficult to learn the language (Elizabeth, 2017). Learners do not know affixation. It is why the teachers think that the use of affixes in the dictionary is necessary. The dictionary, which is considered the key to finding the meaning of words, cannot be used by novice ILF learners because it requires knowledge of basic words. The difficulty in determining basic words is because novice learners have not learned about word formation. It is a challenge for ILF learners to learn the basic form of a word, a word that does not have a prefix or a suffix.

Concerning the dictionary being used recently, teachers (77%) and learners (59%) state that they use the Great Dictionary of Indonesian Language (KBBI) both in print and digital form. As many as 20% of learner respondents state that they use Google Translate. According to the teachers, ILF learners use bilingual dictionaries (23%) and google translate (11%). Several dictionaries used by learner respondents are Tuttle Pocket Indonesian Dictionary, Oxford Dictionary, Cambridge, Thesaurus, Steven & Tellings, Glosbe, Id-TH Dictionary, Wiblio, Heuken, Hamiyah's Indonesian-Arabic Dictionary, Indonesian Dictionary-Updated Japanese, Indonesian-English Dictionary M. Echols and Hasan Shadily, and Dictionary Web.

Both teachers and learners stated that they needed a dictionary for finding the meaning of words, finding ways to use words correctly, and looking for forms of affixes. Meanwhile, other functions were to find out how to pronounce words correctly, how to spell words, and look for synonyms, antonyms, and slang words. The dictionary was also used by respondents for independent study, looking for basic words, standard word forms, knowing the position of words in a sentence, and finding frequently used words. Thus, these reasons should be used as a basis for developing a dictionary for ILF learners, to address the specific needs of beginner, advanced, and special ILF learners. The **Figure 5** below shows the reasons of ILF learners for using a dictionary.

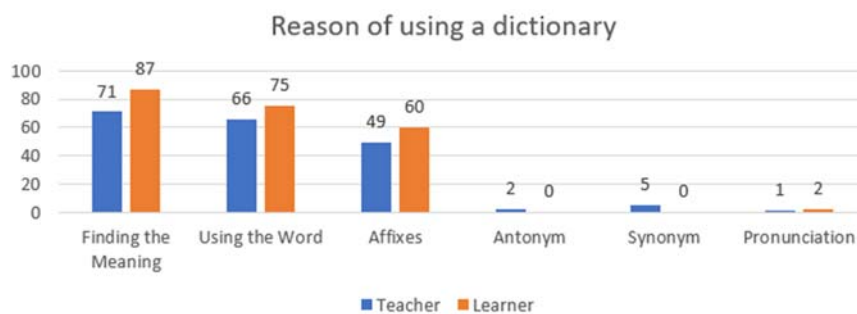


Figure 5. Reasons for using a dictionary.

According to lexicographers, dictionaries are usually designed to meet the general needs of dictionary users in large groups. Little attention has been given to the specific needs of small-group users. However, the current development of dictionaries focuses on the perspective of user needs (Hartmann and James, 1998) because different users of dictionaries have different reasons and goals.

4. Conclusion

From this study, it can be concluded that the ILF learners have not already used a dictionary that suits their current needs. They still used a monolingual digital dictionary. This need analysis shows that the ILF beginner learners need a digital bilingual dictionary of Indonesian-Learner's L1. For adult learners, a dictionary for ILF learning is expected to contain high-frequency words as it impacts positively their foreign language learning. The dictionary is expected to provide information regarding the use of words in sentences, with rich sentence examples. In addition, the ILF learners need a dictionary to learn about phrases, word classes, affixes, pronunciation, antonyms, and synonyms of words.

It is hoped that the results of this preliminary study can be used as a basis for developing a dictionary for ILF learning, especially for those at the beginner level. It is because a good dictionary is developed based on user needs. Concerning the limitation of this study, the number of respondents should be higher to garner a more comprehensive picture of the ILF learners' needs. As the student respondents' perspectives are only obtained via questionnaires distributed using Google form, it is

necessary to carry out further research employing in-depth interviews with several selected participants.

Despite the relevant aspects showcased above, this study also warrants further research, especially about the development of an HFW dictionary for ILF-1 learners. Therefore, in the future, there will be more comprehensive resources as a reference for the development of the digital dictionary for ILF learning.

Author contributions

Conceptualization, ENMS, LM and EB; methodology, ENMS, LM and EB; software, ENMS; validation, ENMS, LM and EB; formal analysis, ENMS and LM; investigation, ENMS and EB; resources, LM; data curation, EB; writing—original draft preparation, ENMS; writing—review and editing, ENMS; visualization, ENMS; supervision, LM and EB; project administration, ENMS; funding acquisition, ENMS. All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare that they have no conflict of interest.

References

- Ambarwati R, Mandasari B (2020). The influence of online Cambridge dictionary towards learners' pronunciation and vocabulary mastery. *Journal of English Language Teaching and Learning* 1(2): 50–55.
- Anthony L (2012). Automatic generation of high-frequency vocabulary lists and level-adjusted exemplar sentences for non-native speakers of English. In: The Editorial Committee of the English Language Education Society of Japan (editor). *Proceedings of the 41st Annual Meeting of the English Language Education Society of Japan*. Institute for Digital Enhancement of Cognitive Development, Waseda University. pp. 7–14.
- Ariyani F, Putrawan GE, Riyanda AR, et al. (2022). Technology and minority language: An Android-based dictionary development for the Lampung language maintenance in Indonesia. *Tapuya: Latin American Science, Technology and Society* 5(1). doi: 10.1080/25729861.2021.2015088
- Atkins BT, Rundell M (2008). *The Oxford Guide to Practical Lexicography*. Oxford University Press.
- Brysaert M, Mandra P, Keuleers E (2018). The word frequency effect in word processing: An updated review. *Current Directions in Psychological Science* 27(1): 45–50. doi: 10.1177/0963721417727521
- Coxhead A (2000). A new academic word list. *TESOL Quarterly* 34(2): 213–238. doi: 10.2307/3587951
- Coyle D (2013). Listening to learners: An investigation into “successful learning” across CLIL contexts. *International Journal of Bilingual Education and Bilingualism* 16(3): 244–266. doi: 10.1080/13670050.2013.777384
- Dang TNY, Webb S, Coxhead A (2020). Evaluating lists of high-frequency words: Teachers' and learners' perspectives. *Language Teaching Research* 26(4). doi: 10.1177/1362168820911189
- De Schryver GM (2003). Lexicographers dream in the electronic-dictionary age. *International Journal of Lexicography* 16(2): 143–199. doi: 10.1093/ijl/16.2.143
- Elizabeth R (2017). Utilization of product packaging as authentic material in learning affixes in Indonesian for speakers of foreign languages (BIPA) classes (Indonesian). *Jurnal Linguistik Terapan* 7(1): 56–60.
- Ezeh NG, Anyanwu EC, Onunkwo CM (2022). Dictionary as an effective resource in teaching and learning of English as a second language: Complementing instructions. *English Language Teaching* 15(4): 108. doi: 10.5539/elt.v15n4p108
- Fadly A (2018). Development of Indonesian language learner dictionary for elementary level foreign speakers at Universitas Muhammadiyah Jakarta (Indonesian). *Pena Literasi* 1(2). doi: 10.24853/pl.1.2.74-80
- Frost RLA, Monaghan P, Christiansen MH (2019). Mark my words: High frequency marker words impact early stages of language learning. *Journal of Experimental Psychology: Learning Memory and Cognition* 45(10): 1883–1898. doi: 10.1037/xlm0000683

- Ganem-Gutierrez GA, Gilmore A (2021). A mixed methods case study on the use and impact of web-based lexicographic tools on L2 writing. *Computer Assisted Language Learning*. doi: 10.1080/09588221.2021.1987272
- Gutierrez CHS, Serrano MP, Garcia PR (2019). The effects of word frequency and typographical enhancement on incidental vocabulary learning in reading. *Journal of Spanish Language Teaching* 6(1): 14–31. doi: 10.1080/23247797.2019.1590000
- Harmer J (2007). *The Practice of English Language Teaching*, 4th ed. Longman.
- Hartmann RRR, James G (1998). *Dictionary of Lexicography*. Routledge.
- Ishikawa S (2019). A reconsideration of the construct of “a vocabulary for Japanese learners of English”: A critical comparison of the JACET wordlists and new general service lists. *Vocabulary Learning and Instruction* 8(1): 1–7. doi: 10.7820/vli.v08.1.2187-2759
- Jendrych E (2013). Developments in ESP teaching. *Studies in Logic, Grammar and Rhetoric* 34(47): 43–58. doi: 10.2478/slgr-2013-0022
- Johns JL, Wilke KH (2018). High-frequency words: Some ways to teach and help learners practice and learn them. *Texas Journal of Literacy Education* 6(1): 3–13.
- Liu D, Deng Y, Yang S (2021). Evaluating popular online English-Chinese dictionaries in China by applying Lew and Szarowska’s (2017) evaluation framework. *International Journal of Lexicography* 34(2): 157–182. doi: 10.1093/ijl/eca026
- Liu TC, Fan MH, Paas F (2014). Effects of digital dictionary format on the incidental acquisition of spelling knowledge and cognitive load during second language learning: Click-on vs. key-in dictionaries. *Computers and Education* 70: 9–20. doi: 10.1016/j.compedu.2013.08.001
- Martinez D, Singleton JL (2019). The effect of bilingualism on lexical learning and memory across two language modalities: Some evidence for a domain-specific, but not general, advantage. *Journal of Cognitive Psychology* 31(5–6): 559–581. doi: 10.1080/20445911.2019.1634080
- Melati S (2017). Design of an Android-based Indonesian idiom dictionary for BIPA learners (Indonesian). *Jurnal Penelitian Pendidikan RANCANG* 34(1): 69–76.
- Muhadjir N, Lauder M, Andriani M, et al. (1996). *Frequency of Indonesian Vocabulary* (Indonesian). Fakultas Sastra, Universitas Indonesia.
- Nation P (2001). *Learning Vocabulary in Another Language*. Cambridge University Press.
- Nordlund M (2016). EFL textbooks for young learners: A comparative analysis of vocabulary. *Education Inquiry* 7(1). doi: 10.3402/edui.v7.27764
- Pamuji KD, Setyarini S (2020). Technology for extensive listening practice: EFL teachers’ preferences and views. In: Proceedings of the 6th International Conference on Frontiers of Educational Technologies (ICFET); 5–8 June 2020; Tokyo, Japan. pp. 77–81.
- Pamuji KD, Waring R, Kurniawan E (2019). EFL teachers’ experiences in developing L2 proficiency through extensive listening. *TEFLIN Journal* 30(2): 257–273. doi: 10.15 639/teflinjournal.v30i2/257-273
- Quinn G, Kozok U (2001). *The Indonesian Way: Taking Creatively in Standard Indonesia: A Practical Workbook for Classroom Use or Self-study*. Australian National University Press.
- Rahimi M, Miri SS (2014). The impact of mobile dictionary use on language learning. *Procedia—Social and Behavioral Sciences* 98: 1469–1474. doi: 10.1016/j.sbspro.2014.03.567
- Sa’diyah I (2020). Indonesian audio dictionary application for BIPA (Indonesian for foreign language speakers) students (Indonesian). *Seminar Nasional Informatika Bela Negara (SANTIKA)* 1. doi: 10.33005/santika.v1i0.25
- Suhandoko S, Ningrum DR (2020). A corpus-based list of academic English derivational suffixes. *Indonesian Journal of Applied Linguistics* 10(2): 481–490. doi: 10.17509/ijal.v10i2.28589
- Tsz W (2017). Decoding the translations of political terms in the nineteenth-century Chinese-English dictionaries—Lobscheid and his Chinese-English dictionary. *Comparative Literature: East & West* 1(2): 204–215. doi: 10.1080/25723618.2017.1387975
- Vaupot S (2021). Creating a bilingual dictionary of collocations: A learner-oriented approach. *Indonesian Journal of Applied Linguistics* 10(3): 762–770. doi: 10.17509/ijal.v10i3.31888
- Webb S, Nation P (2012). Teaching vocabulary. In: Chapelle CA (editor). *The Encyclopedia of Applied Linguistics*. Wiley-Blackwell.