

Developing a Corpus-Based English Vocabulary Dictionary using The ADDIE Model

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Abstrak

Beberapa siswa masih belum mampu berbicara dan memahami teks dan menulis dalam bahasa Inggris akibat siswa belum terbiasa membawa kamus. Kamus berbasis korpus dapat membantu siswa dalam akses belajar bahasa Inggris. Tujuan dari penelitian ini adalah mengembangkan kamus kosakata bahasa Inggris berbasis korpus. Obyek penelitian adalah siswa kelas 8 dan guru bahasa di Sekolah Menengah Pertama Al Manshur, Sidoarjo. Penelitian pengembangan pendidikan ini menggunakan model ADDIE. Penelitian melakukan uji kelayakan kamus berbasis korpus menggunakan validasi dari ahli desain, ahli materi, dan ahli bahasa dengan instrumen pengumpulan data angket respon. Hasil penelitian menunjukkan pendapat ahli desain dengan skor 92% sebagai kriteria sangat baik. Hasil validasi materi memperoleh skor 96% dengan kriteria sangat baik. Hasil validasi kebahasaan mencapai skor 85% dengan kriteria sangat baik. Siswa dan guru merespon sangat tertarik terlihat dari skor 100%.

Kata kunci

ADDIE; Kamus; Korpus; Pengembangan pendidikan; Pendidikan bahasa Inggris

Abstract

Some students are still unable to speak and understand texts and write in English because students are not used to carrying dictionaries. Corpus-based dictionaries can help students access English learning. This research aims to develop a corpus-based English vocabulary dictionary. The research objects were grade 8 students and language teachers at Al Manshur Junior High School, Sidoarjo. This educational development research uses the ADDIE model. The study conducted a feasibility test for a corpus-based dictionary using validation from design experts, material experts, and language experts with a response questionnaire data collection instrument. The research results show the opinion of design experts with a score of 92%, a very good criterion. The material validation results obtained a score of 96%, a very good standard. The linguistic validation results achieved a score of 85%, a very good criterion. Students and teachers responded very interested, as seen from the score of 100%.

Keywords

ADDIE; Corpus; Dictionary; Educational development; English language education

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Introduction

English has become a world language that dominates the communication era to connect and transfer knowledge worldwide. The State of Indonesia has anticipated the requirement to be able to speak English both actively and passively to include English as a local subject in kindergarten and elementary school and become a compulsory subject in junior and senior high school. English is a language that is designated as an international language, and everyone in this part of the world can communicate using English. Education First (EF) has just released its 2021 English proficiency index report for countries in Southeast Asia. As a result, the Indonesian people's level of English proficiency is only in fifth place. EF assigns a score of 466 to Indonesians' English proficiency level. Thus, the level of English proficiency of Indonesians is still relatively low (Pahlevi, 2021). Based on these data, it is stated that the level of English proficiency of Indonesians is still relatively low, so efforts need to be made to improve English proficiency. Efforts to increase English proficiency so that they are ready for the ASEAN Economic Community (AEC). Improving the quality of human resources is the key to success in facing the free market in the AEC era. The way to overcome this is by increasing the skills required to learn English (Firdaus *et al.*, 2021). One of them is the use of vocabulary in English. One of the efforts to maximize learning English is to improve English vocabulary.

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Vocabulary is one of the points that students must master. Vocabulary has benefits and an essential role in linguistics. The importance of mastering vocabulary is because, without sufficient vocabulary mastery, a person cannot express ideas and respond to the language he receives (Wati and Oka, 2021). Vocabulary is a set of words owned by a person or other entity or part of a particular language. A person's vocabulary is defined as the set of all the words that the person understands or all the words that are likely to be used by the person to construct new sentences. Mastering a lot of vocabulary will make it easier for someone to read, write, listen, and speak English.

The students also faced the problem of a lack of vocabulary; with this issue, the researcher interviewed an English teacher in Junior High School on 26th November 2022. In learning English, especially speech, to increase English vocabulary for eighth grade Junior High School students, it is better to use a dictionary to improve vocabulary and use a mobile phone to utilize digital technology to make it easier to find language challenging to understand, especially at SMP Al Mansur, Candi. Departing from the problems described, the researcher's solution is the A Corpus-Based English Vocabulary Dictionary. The researcher developed a corpus-based English vocabulary dictionary focusing on particular material in the eighth grade in Junior High School. This research was carried out because the application of the corpus in teaching English vocabulary is closely related to the appearance of these words in different contexts (Scott and Tribble, 2007; Asitah and Ismafitri, 2021). Information frequency ensures learners get the best results for their vocabulary learning efforts. The researcher initiated the development of a corpus-based vocabulary English dictionary to help students find its meaning and make students understand the concept of linking. One word can be linked to any word and has different meanings, so students can know what an applicable cable dictionary is and use it during processing learning.

The application of the corpus in teaching English vocabulary is closely related to the appearance of these words in different contexts. Digital education plays a role in improving the quality of language education (Purnomo *et al.*, 2021). Using software such as AntConc or online sources such as COCA corpus in analyzing data will later be used as material for filling in the Corpus-based dictionary. Using corpus-based dictionaries also provides learners with relevant idiomatic and valuable information to help them set up native-like links between words and meanings (Paradis and Willners, 2006). In that

case, it allows students to see how the term is used and organize vocabulary based on its frequency. The frequency of information ensures learners get the best results for their vocabulary learning efforts. Therefore, this research aims to develop a corpus-based English vocabulary dictionary.

Method

This research design is educational development research (Anam, 2017). According to Richey (1994), developmental research is the systematic study of designing, developing, and evaluating instructional programs, processes, and products that must meet the criteria of internal consistency and effectiveness (Richey, 1994). The research objects were grade 8 students and language teachers at Al Manshur Junior High School (SMP), Candi, Sidoarjo, Indonesia. The researchers have used the ADDIE model to develop the dictionary. ADDIE consists of five stages: analysis, design, development, implementation, and evaluation (Branch, 2009). The research object of this research is a Corpus-Based English Vocabulary Dictionary for Eighth Grader that developed from the book that used by the student at Al-Manshur Junior High School (SMP) entitled "When English Rings a Bell" and the book entitled "Buku Interaktif Bahasa Inggris". The materials selected were asking for attention and permission, recounting text, asking for opinion, asking and giving suggestion, invitation letters, giving instruction, descriptive text, simple present tense, simple past tense, present continuous.

The Data collection technique used interviews to find the problem, a questionnaire to find data on the validation process, the implementation process for teachers and students as respondents, and documentation for materials to gather evidence to support the design part of the dictionary. The researchers used interview sheets, questionnaire sheets, validation questionnaires, and respondent questionnaires. The data from the implementation stage collected through questionnaires and validation were analyzed through qualitative descriptive analysis for suggestions and input given by experts, which are analyzed descriptively (Leavy, 2017). Researchers have used a Likert to determine the validity of product results. To find out the responses of students' and teachers' questionnaires, researchers have used a Guttman Scale.

Result and Discussion

Result

Vocabulary plays a vital role in language learning. Without sufficient vocabulary, people cannot effectively express their ideas to communicate in spoken and written form (Salawazo *et al.*, 2020). According to Kennedy (2014), a corpus is a body of written text or transcribed speech that can serve as a basis for linguistic analysis and description (Fauzi and Suradi, 2020). The student can quickly generate lists of semantically related words and then use them directly as part of a query (Liu, 2014). The purpose of using the corpus is so that students can observe the vocabulary that appears most often in a material. Using intelligent digital tools, students can find every example in a given set of words, phrases, grammatical patterns, or collocations. This information forms the basis for everything we say about words in dictionaries (Anthony, 2011).

The result of the development process was a corpus-based dictionary for eighth grade. This corpus-based dictionary includes some materials asking for permission, asking for attention, checking for understanding, giving compliments, giving instruction, giving opinions, greeting cards, obligation, present continuous, simple present tense, suggestion, and descriptive text. The software used in this educational development research was AntCont and Canva. This research uses the ADDIE model developed by Branch, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. The vocabulary in the corpus-based dictionary is taken from the material presented by Kemdikbud in Permendikbud Number 37, 2018. The ADDIE steps conducted by the researcher are explained as follows:

1. Analysis

Based on the interview with the English teacher at Al Manshur Junior High School, the researcher learned that students need help finding meanings in the dictionary, no library to access the dictionary, and school regulations prohibit students from bringing cell phones to class. Based on the interviews and the problems found,

eighth-grade students need a dictionary to help them increase their vocabulary. Students could still not speak and understand texts and write in English due to a lack of vocabulary. Students have difficulty bringing a dictionary when learning English. There were restrictions on students carrying cell phones, and no library could access or find English dictionaries.

2. Design

Canva is the website used to develop this corpus-based dictionary. Researchers use Canva to arrange dictionary views. They started by setting the design size to A6 size. Then, the researchers make a table for the sentences that will be included in the dictionary. After selecting the paper size and creating tables, the researchers typed all the vocabulary sentences into Design Canva and provided an Indonesian translation for each vocabulary. Each page in this dictionary contains terminology in sentences, making it easier for students to understand vocabulary.

Materials presentation design, the material in this dictionary is compiled from various references such as the student's English book entitled "When English Rings a Bell" by *Kementerian Pendidikan dan Kebudayaan Republik Indonesia* and "*Buku Interaktif Bahasa Inggris*" by Intan Pariwara Publisher 2021. The researchers determine the vocabulary to be included in the dictionary by selecting the language that often appears through the AntCont application, as shown in Figure 1.

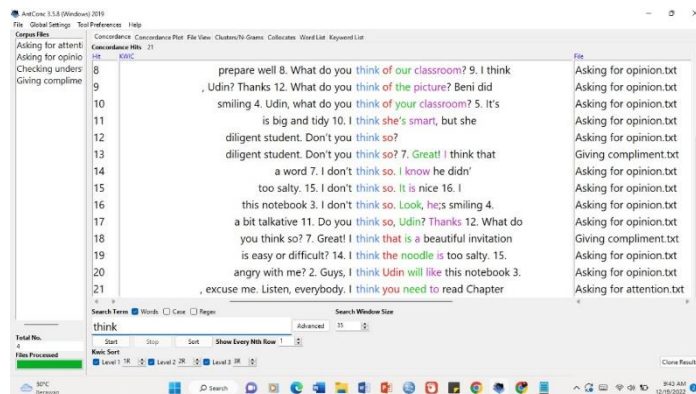


Figure 1. AntConc application display

3. Development

At this stage, the AntCont application and Canva website were used with the following steps. 1) The researchers used an English language textbook entitled "When English Rings a Bell," an English interactive book. 2) Researchers also take a reference on the website <https://www.quipper.com>, <https://www.ruangguru.com>, <https://www.ef.co.id>, <https://www.zenius.net>, and <https://www.quipper.com>. 3) Researchers analyzed formatted files (txt) into the AntConc application to find the frequency most often appearing in each selected material. 5) After finding any vocabulary in the dictionary, the researchers translated the sentence from Google Translate, DeepL Translator, and KBBI to get accurate results.

Researchers have completed the first draft of the dictionary, as shown in Figure 2 and Figure 3. Several steps have been carried out in this stage so the researcher can produce a draft. After the first draft is completed, the validation process follows. Validation was carried out to consult about developing dictionaries to experts. Validation was given to the design expert, with the aspects assessed were aspects of display design and aspects of using the dictionary. The second validation was given to material experts with aspects that are considered aspects of content quality. The third validation was given to linguistic experts, with the aspects assessed as linguistic.

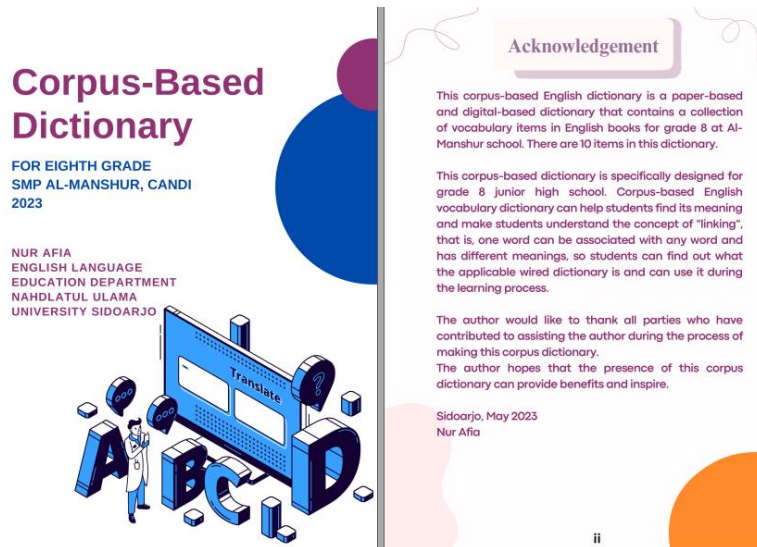


Figure 2. Dictionary display

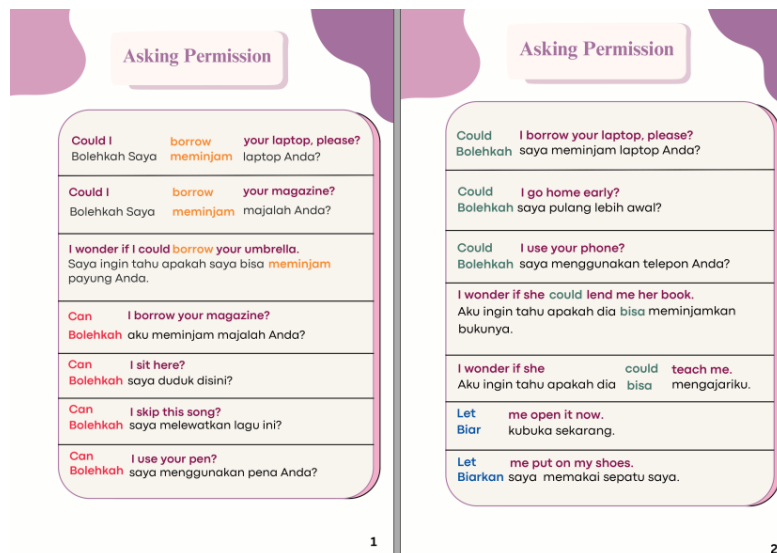


Figure 3. Dictionary material

4. Implementation

Implementation is carried out after it has been declared feasible by a design, linguistics, and materials expert. Next, the performance was held with eighth-grade students at Al Manshur Junior High School with fifteen students. This implementation was carried out to apply this corpus-based dictionary to teaching English. The researchers implemented the media based on the lesson plan that the teacher had developed.

5. Evaluation

The final stage is an overall evaluation of all the steps that have been carried out. After obtaining the analysis, the design stage was carried out by adjusting the analysis stage, such as the problems faced by students, the lack of school facilities such as libraries, the needs used in the school environment, and the need for a dictionary that supports English learning activities in eighth grade. Therefore, the researchers encouraged the development of corpus-based dictionary. In addition, the teacher also filled out a questionnaire regarding responses to the application of the dictionary. The results of students and teachers obtained a percentage of 100% with the criteria being achieved "very interesting," so this corpus-based dictionary can be used in learning English material for

grade eight at Al Manshur Junior High School because this dictionary is attractive to students and is practically carried everywhere.

Discussion

The results of the student questionnaire, with the first indicator being the attractiveness of the dictionary, the second indicator being an easy-to-understand language, the third indicator being a clear picture, the fourth indicator being an easy-to-understand presentation, the fifth indicator being interesting color selection, the sixth indicator being an efficient dictionary, the seventh indicator being an easy-to-understand dictionary. The application of media in Al Manshur Junior High School obtained a percentage of 100% with the criteria achieved very interesting, and this dictionary can be used in learning for eighth grade Al Manshur Junior High School because it meets the requirements for sufficient attractiveness. The English teacher's questionnaire results also obtained very interesting criteria because this dictionary is attractive to students and practical to use and carry everywhere.

This corpus-based dictionary was developed to make it easier for students to learn English. This educational development aims to produce supplementary material, such as a dictionary for the eighth grade of junior high school. In developing a corpus-based dictionary, researchers used the educational development research design. The educational development model used is ADDIE, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. The researchers compiled and edited the design on a corpus-based dictionary. Then, validation is carried out by design experts, linguistic experts, and materials experts. Each expert has validated one time. In the design expert validation, 92% stated excellent, with the revision on the page below. Shifting the layout for print, and the cover is replaced with another design. In the validation, 96% of the material experts stated excellent with the revision was it takes several colors to distinguish the types of words. At validation, 85% of linguistic experts said excellent with modifications in punctuation, using translations from other websites to be accurate, and paying more attention to lines. The dictionary is suitable for use following the expert decisions of design, linguistics, and material. The final product of the development is a corpus-based dictionary consisting of two formats: paper-based and pdf. This dictionary consists of 72 pages.

Conclusion

Based on the research and discussion previously described, a corpus-based dictionary was developed using Canva. This dictionary was created using the ADDIE model, which goes through five stages: analysis, design, development, implementation, and evaluation. The conclusions that can be drawn from this development research were as follows: the development of this corpus-based dictionary has been validated once by several design experts with a percentage of 92%. Material experts once with a rate of 96%, and linguists get 85%. This shows that corpus-based dictionaries are appropriate for use by teachers in teaching English, especially for the eighth grade of junior high schools. The corpus-based dictionary is a useful supplementary material for teachers and students because this dictionary can assist teachers in assisting students in learning English. Developing a corpus-based dictionary seems appropriate for eighth graders of junior high school. The results of the questionnaire on teachers and 16 students with an average of 100% obtained the criteria of excellent.

Limitation

The educational development of this corpus-based dictionary is limited to junior high schools in the Sidoarjo district and with material for eighth grade.

Conflict of interest

There are no potential conflicts of interest relevant to this article.

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