

DEVELOPMENT OF LOCAL WISDOM-BASED E-FLIPBOOKS FOR UNDERSTANDING ENGLISH VOCABULARY FOR STUDENTS WITH DISABILITIES AT SAHID UNIVERSITY SURAKARTA

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Abstract: *Students with special needs need help understanding English vocabulary due to limited hearing and communication skills. Therefore, the proposer provides an alternative solution to improve learning through e-flipbooks based on local wisdom. The purpose of this study is to (1) Describe the mapping of the needs of students with disabilities regarding English learning materials for students with disabilities at Sahid University Surakarta and (2) Describe the development of e-flipbooks based on local wisdom for teaching English vocabulary to students with disabilities at Sahid University Surakarta. This model development research begins with a need analysis mapping the needs of students with disabilities in learning English, especially regarding vocabulary. Furthermore, the 4D development model (define, design, develop and disseminate). With the convenience of e-flipbook teaching media based on local wisdom, learners with disabilities can use this teaching media to understand English vocabulary more quickly.*

Keywords: *English, e-flipbook, disabilities students, teaching media*

1. INTRODUCTION

Educational developments occur in various aspects, such as learning methods, media, and the learning process. According to Ki Hajar Dewantara, education is an effort to prepare students through teaching and training guidance activities for their future roles (1). Therefore, lecturers are expected to carry out their duties better. Education can be interpreted as a conscious effort to make oneself better. The Big Indonesian Dictionary (KBBI) states that education is the process of changing the attitudes and behaviour of a person or group of people to mature humans through teaching and training efforts (2) Mastery and understanding of English are also basic needs in various activities, including education. Educational developments occur in multiple aspects, such as learning methods, media, and the learning process. One of the crucial abilities in education is mastering and understanding English. Given the existence of AFTA (ASEAN Free Trade Area), anyone must have qualified English skills in oral and written communication.

In line with this, the ability to have English skills for students, especially students with special needs (Deaf), becomes challenging. They have limitations in hearing and how to communicate. It is relevant that students with special needs refer to physical, mental, or psychological conditions that can hinder learning in the classroom (3). Conventional books used by teachers generally do not provide alternative solutions for students with special needs in understanding vocabulary, so special media is needed to improve students' vocabulary skills. In this regard, the proposer was inspired to find solutions to their problems related to understanding English subjects, especially in mastering English vocabulary. English vocabulary is essential because by mastering English vocabulary, students will have the provision to master all other skills in English more easily. In answering these problems, it is necessary to develop teaching media to facilitate the needs of students with special needs

(deaf). The development of e-flipbooks is the answer to this challenge. The utilization of e-flipbook is certainly adjusted to the results of the analysis of the needs of the students.

With the e-flipbook, the learning process is expected to be more helpful, directed, and effective in achieving the desired final goal. This is in line with the fact that the development of teaching materials must be carefully planned so that the required components are fulfilled (4). E-Flipbook is software that has a function to open each page that resembles a book, whereas e-flipbook software can turn pdf images into a book or album shape when opened one by one page. E-Flipbook is also used to create e-books, e-modules, e-papers and e-magazines. Text e-flipbooks can also insert images, animations, graphics, sounds, links, and worksheet videos (5). The development of e-flipbooks focuses on helping students with disabilities at Sahid University Surakarta understand English lecture material to make it easier for students to understand English vocabulary, which is helpful in vocabulary skills in English. This makes the impression that learning English vocabulary is more flexible, interactive and easy to understand because it is equipped with colours, images and animations. Their hearing limitations will be helped by visualizing interesting material and making it easier for students with special needs to understand English vocabulary.

Making flipbooks using the e-flipbook maker application, namely through the web www.flipbook.com, involves first creating a draft book through the Canva application (6). Wisdom, in a broad sense, includes not only cultural norms and values but also all elements of ideas, including those with implications for technology.

The proposer uses the Kvisoft flipbook application to design an e-flipbook to improve English vocabulary skills for Deaf students at Sahid University Surakarta. Based on this background, the formulation of this research problem includes:

- a. How is mapping the needs analysis results related to the design of local wisdom-based e-flipbooks for students with disabilities in the Surakarta Usahid Environment?
- b. How is the design of developing a local wisdom-based e-flipbook for teaching English vocabulary to students with disabilities in the Usahid Surakarta environment?

The problem-solving approach proposed in this research is to design a local wisdom-based e-flipbook teaching media to improve English language skills, especially English vocabulary, for students with special needs (deaf) so that the learning difficulties of learning English for students with special needs (deaf) can be helped through mapping the mastery of English vocabulary and developing e-flipbooks based on local wisdom.

The first research is entitled Development of Electronic Module 'Flipbook' as Teaching Materials for Enrichment of English Writing Skills. The results showed that the material expert gave a final assessment by placing the product in the valid category. (7). The second study, "The Use of Flipbook Learning Media to Improve Student Activity and Learning Outcomes". The results of this study indicate that the improvement in learning outcomes can be seen through the results of the learning evaluation at the end of the learning process. (8). The third study, entitled Development of Multimedia-Based Electronic Teaching Materials Using Flip PDF on English Subjects (Case Study: At Madrasah Ibtidaiyah Swasta MIS Hidayatul Muhajirin), Based on research that has been done, the results of electronic teaching materials in the feasible category with an average percentage of 76.83% according to material experts. (9). Ai Tin Sumartini has also studied the effectiveness of using e-flipbooks in her research journal entitled The Effectiveness of Using Flipbook Teaching Materials with the Google Classroom Platform in Distance Learning. The advantages of using flipbook teaching materials based on the questionnaire results show the predicate of "good" assessment (11).

The current novelty of the research is the development of flipbook teaching materials that prioritize local wisdom. The teaching materials in e-flipbooks contain additional pictures of cultural patterns as Javanese cultural identity (12). The existence of additional local wisdom

patterns is to provide a touch of cultural values for students. This is the opinion that local wisdom is defined as wisdom in the traditional culture of ethnic groups (6). Suppose the previous research used normal student subjects (no special needs). In that case, the novelty is also in the research subjects where the latest research develops e-flipbooks for students with special needs. The term Tuna means less, and *rungu* means hearing. An individual is said to be deaf if he is unable to hear or less able to hear sound (13). Thus, the development of e-flipbooks aims to provide alternative teaching media that makes it easier for students with special needs specifically who are deaf to increase their English vocabulary. However the e-flipbook can be also used for the other special needs students.

2. RESEARCH METHOD

This study's subjects were students with special needs at Sahid University Surakarta. Data related to the vocabulary skills of deaf students is obtained from students with disabilities in the Sahid University Surakarta environment. Furthermore, the Local Wisdom-Based E-Flipbook began to be developed to improve the vocabulary of deaf students.

The development of the E-Flipbook Based on Local Wisdom uses 4D (14), which consists of 4 stages: define, design, develop, and disseminate. After learning to use e-flipbooks with local wisdom, an experimental study is needed to test its feasibility. So, the next subject is required for the environment of Sahid University Surakarta. Furthermore, this experimentally tested model is disseminated to Sahid University students. The subjects in this study were students with special needs at Sahid University Surakarta. Data collection related to the vocabulary skills of deaf students is obtained from students with disabilities in the Sahid University Surakarta environment. Furthermore, the Local Wisdom-Based E-Flipbook began to be developed to improve the vocabulary of deaf students.

The development of an E-Flipbook Based on Local Wisdom uses 4D (14), which consists of four stages: define, design, develop, and disseminate. After learning to use e-flipbooks with local wisdom, an experimental study is needed to test its feasibility. The next subject is required for the environment of Sahid University Surakarta. Furthermore, this experimentally tested model has been disseminated to Sahid University Surakarta students.

This qualitative research type is planned to be completed within 1 year. Each of them has two problems that must be resolved, namely (1) The availability of learning media for innovative Sahid University Surakarta students and (2) the effectiveness of the E-Flipbook for deaf students at Sahid University Surakarta.

The main instrument in this research is researcher observation because this type of research is quantitative and qualitative. Researchers used several instruments, namely: 1. Documents Documents related to General English Courses, such as curriculum containing learning outcomes, RPS, and existing teaching materials, were analyzed to obtain initial data for needs analysis. 2. Questionnaires are used to collect data related to competencies that need to be mastered by students in General English Courses and other competencies needed in the field. The questionnaire consisted of three main topics: student profiles, student needs, and learning methods desired by students during the learning process. 3. Interviews and interviews were used to explore detailed information related to the conditions of ideal digital teaching materials for General English Courses. Researchers used triangulation techniques to validate the data. The type of triangulation in this research is method triangulation (15). This triangulation is used with a combination of test and interview methods so that the data can be observed validly; the researcher can use other sources, namely the teacher or student concerned, to map the English vocabulary abilities of students with disabilities in the Sahid University Surakarta environment.

3. RESULT AND DISCUSSION

The results of this research are elaborated in three main topics: student profiles, student attitudes, and English language learning. In addition, the e-module draft, which is a follow-up to the needs analysis, is also seen in the results of this study.

A. Student Profile

This section includes which study program they come from. Sahid University Surakarta has nine study programs: Visual Communication Design, Business Administration, Interior Design, Psychology, Pharmacy, Nursing, Informatics, Industrial Engineering, and Communication Science. From these various study programs, there are eight respondent students with disabilities. Based on the findings, most student respondents with disabilities come from the Visual Communication Design study program, namely 75% or six students. The Business Administration Study Program is 12.5% or one student, and the Informatics Study Program is 12.5% or one student.

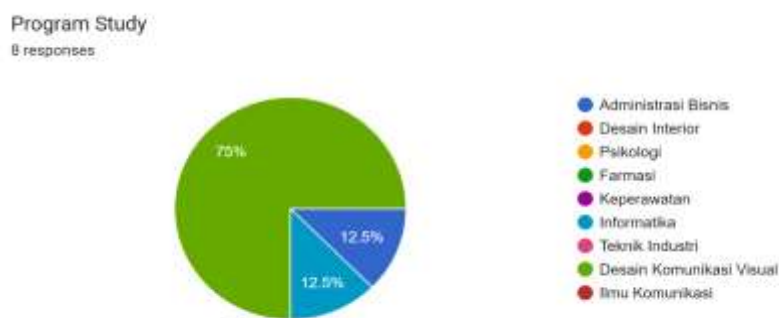


Figure 1. Study Program (%)

Source: Questionnaire Data

Of the eight respondents, students with disabilities who filled in were divided into several types of disabilities, namely hearing, physical men, mental and intellectual disabilities. The details are as follows: students with hearing disabilities are 50% or four students, and students with intellectual disabilities are one student or 12.5%. Students with physical disabilities, one student or 12.5%. Students with mental disabilities are one student or 12.5%, and disabilities with speech order disorders or communication disorders are one student or 12.5%.

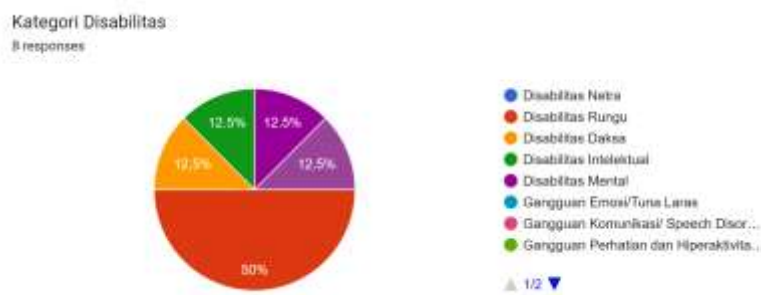


Figure 2. Disability Category (%)

Source: Questionnaire Data

The above findings are relevant to the results of an interview with the head of Ulapsi at Sahid University Surakarta: "Students with disabilities at Sahid University Surakarta are special students who, if they get the right way and a good breakthrough, will help them with teaching material. "Students with hearing disabilities, for example, will be helped by pictures, so they are capable if given the suitable method or method. "

B. Student Attitudes

This second section aims to determine students' general attitudes toward and understanding of English. Disabled students at Sahid University Surakarta have the same level of awareness as regular students. They only have limitations on certain things. This is shown by the results of the Questionnaire, which states

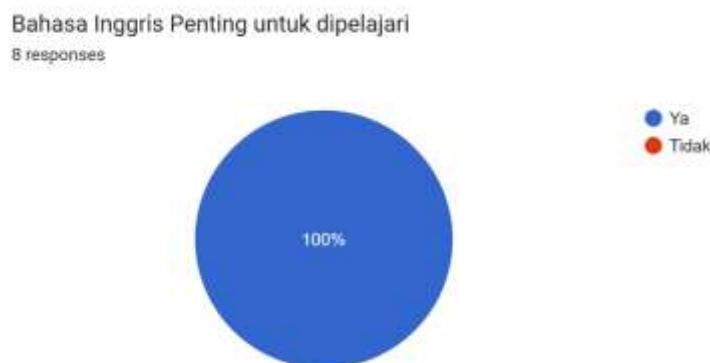


Figure 3. The level of importance of English (%)

Source: Questionnaire Data

100% of the eight respondents who were students with disabilities stated that English is an essential course to learn, so they consciously desire to discover it. The importance of learning English arises because they aim to learn English. This is stated in the results of interviews with them:

"I Study English"

"The reason I want to increase my knowledge"

"The reason I want to learn more knowledge"

"I want to increase my knowledge and communicate with foreigners abroad."

"Communicate Globally: English is an international language used in many countries." "By mastering English, we can communicate with people worldwide.

Entering EPT qualifies for graduation."

"I want to be able to speak English."

"because English is an international language, the purpose of learning English is to expand access to information around the world; besides that, it makes it easier in the future to get extensive job opportunities, etc."

The results of these interviews show that students with disabilities have various motives, but the core of their goal is the same, namely wanting to have good English skills. Students with disabilities at Sahid University Surakarta can read (read) as many as 62.5% or five students, write 25% or two students and speak one student. The following is the average English language ability/skill that they master:

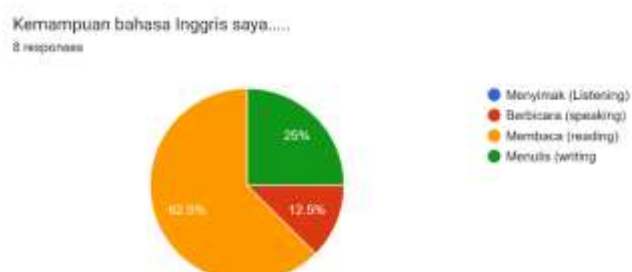


Figure 4. English language skills of Usahid Surakarta disability students (%)
Source: Questionnaire Data

Students with disabilities also have a unique motivation to improve their specific skills, namely speaking skills (speaking) 37.5%, reading (reading) 25%, writing (writing) 12.5%, listening (listening) 12.5% and speaking (speaking) 12.5%.



Figure 5. English skills that Usahid Surakarta disability students want to improve (%)
Source: Questionnaire Data

C. English Language Learning

This third section aims to discover students' difficulties, strategies, and desires in the English learning process. This information can help teachers prepare appropriate teaching materials and media. It cannot be denied that students with disabilities are not the same as regular students in general. This can be seen from the results of 8 respondents of students with disabilities in the environment of Sahid University Surakarta. 50% or half of the respondents stated that English is difficult to learn. 37.5% of respondents said it was easy to understand, and 12.5% said learning right. This shows that they have difficulty when learning English. This is relevant to the theory that students with special needs refer to physical, mental or psychological conditions that may hinder learning in the classroom (3).



Figure 6. Easy or not easy to learn English (%)
Source: Questionnaire Data

Teaching materials and strategies are the most significant contributors to their difficulties in learning English, followed by teaching media.



Figure 10: Aspects of difficulty learning English (%)
Source: Questionnaire Data

However, students with disabilities have autonomous learning in learning English. This can be seen from the results of interviews with students with disabilities at Sahid University Surakarta as follows:

"I'm Trying to Learn English"

"So I want to try to learn English and vocabulary in English."

"I want to communicate with foreigners, so I am trying to learn English and can guess vocabulary in English."

"Open English translation"

"Play games, movies."

"Listen to and watch a lot of English movies."

"The strategy I used during my school days was when, during English lessons, the teacher explained slowly and wrote it on the board, so I understood the material well."

"Animals in English"

"My experience trying to learn English"

"I intend to learn."

"I intend to try to learn English."

"Dictionary: An English dictionary or digital dictionary app can be beneficial for understanding word meanings and increasing vocabulary. Listening practice: Media such as audio conversations, English videos, or podcasts will train your listening skills and understanding of everyday conversations."

"Tutoring"

"speaking practice and grammar knowledge"

One of the disabled students also advised researchers about the English learning process as follows.

"My advice is to use text and visuals to support the material, provide subtitles when there is a video, and provide notes or written material after oral explanation. Also, enable discussions or exercises that involve everyone with accessible methods, such as written discussions or picture and text-based activities."

"provide lots of exercises and games."

This is relevant to the results of this study, which shows that the improvement in learning outcomes can be known through the results of the learning evaluation at the end of the learning process (8). After applying the teaching material "Use of Flipbook Learning Media to Increase Student Activity and Learning Outcomes". With this attraction, students can be more helpful. E-Flipbook is software that has a function to open each page that resembles a book, whereas e-flipbook software can turn pdf images into a book or album shape when opened one by one page. E-Flipbook is also used to create e-books, e-modules, e-papers and e-magazines. Text e-flipbooks can also insert images, animations, graphics, sound, links, and video worksheets (5). It is expected to help students in understanding English vocabulary.

D. Module Draft

Based on the analysis of student needs related to learning materials for General English Courses, a draft of a local wisdom-based e-flipbook was made. The e-flipbook draft was created using the Canva application as the essential book and then designed and compiled at www.flipbook.com. The draft above is teaching material that still needs to be processed to become an e-flipbook. The draft book that has become an e-flipbook form can be accessed at the following link: <https://online.flippingbook.com/view/152909448/>

4. CONCLUSION

This research analyzes that an essential part of second language learning for students with disabilities is when learners with disabilities are given facilities designed according to their needs. In this case, to improve vocabulary skills in English. With the convenience of e-flipbook teaching media based on local wisdom, learners with disabilities can use the teaching media to more easily understand English vocabulary because e-flipbook is designed to attract interest and make it easier for students with disabilities to learn English. The lack of opportunities for students with disabilities to get appropriate teaching media is their limitation. As a result, they often feel anxious and afraid when required to learn English vocabulary.

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