

CHAPTER II

LITERATURE REVIEW

2.1. Theoretical Framework

2.1.1. Definition of Developing

In (Semasinghe, 2020) explained that the term "development" had multiple meanings. The phrase had multiple connotations (Lord Robbins, 1966). It usually referred to good developments or improvements. The definition of "development" has evolved over time to include a wide range of topics.

In (Sustri Harida et al., 2022) explained that developing was the process of transforming instructional specifications into physical forms to enhance learning, increase quality, or create conducive settings for student interaction and behavior change.

Based on the above statement, it could be concluded that developing was a multidimensional notion that had changed greatly throughout time, encompassing a wide range of interpretations and applications. As Semasinghe (2020) points out, the term broadly referred to positive changes and advances in a variety of sectors, whereas Sustri Harida et al. defined it in an educational setting as the actual process of transforming instructional standards into tangible forms. This transformation approach was purposely designed to improve learning experiences, raise quality standards, and foster student connection and behavioral change. Thus, development can be viewed as both a general concept of improvement and a specific methodical procedure in educational settings.

2.1.2 Analysis Students Need

a. Definition of Need Analysis

According to Iwai et al. (1999, p. 6) in (Barghamadi, 2020), needs analysis was defined as an activity involving data collection to create a curriculum tailored to the needs of specific learners.

In (NISHONOV, 2022) explained that needs analysis was essential in English language teaching and learning, whether it's for

specific purposes or general academic use. Additionally, this was an essential component of creating a syllabus for schools or educational institutions.

Based on the above statement, it can be concluded that needs analysis emerged as an important educational approach with numerous applications in English language instruction. While Iwai et al. defined it as a data collection activity aimed specifically at developing learner-tailored curricula, NISHONOV broadened this perspective by emphasizing its universal importance across both specific and general academic English teaching contexts, with a focus on its critical role in syllabus development for educational institutions. Together, these perspectives established needs analysis as an essential first step in developing effective educational programs that met learners' needs at both the institutional and individual levels.

a. Aspects of Students Need

In (Amalia, 2023) explained that student needs analysis involved assessing language skills, including reading and writing, to enhance confidence. Second, students preferred to learn about things that are relevant to their daily life, such as family, cuisine, and hobbies. Third, constraining issues: A variety of problems were discovered to impeded learning, including a lack of vocabulary knowledge, irrelevant themes, and writing fear. Fourth, learning resources: To be effective, materials had to be matched to the requirements and interests of students.

In (Charlina et al., 2022) explained that students' needs were a step in designing learning materials: an effective process had to begin with identifying the real needs of students, both current and target needs. In other words, teachers created materials based on data on student needs so that the objectives, level of difficulty, and activities were relevant and measurable. There were several things that had to be considered in designing materials, namely level

adjustment, task-based learning, and the use of technology to facilitate learning. Students expressed a desire for easily understood learning media that seamlessly integrated with technology.

Based on the above statement, it could be concluded that students' needs were essential in designing English learning materials. The analysis involved assessing language skills, considering relevant daily life topics, identifying learning barriers, and aligning materials with students' interests. Furthermore, the design process had to include level adjustment, task-based learning, and the integration of technology so that the materials were effective, measurable, and accessible for students.

2.1.3. Vocabulary Mastery Test

a. The Importance of Vocabulary Mastery

(Nation, I.S.P., 2001) in (Idayani & Sailun, 2024) explained that vocabulary mastery was essential for proficiency in English as a foreign language, as it enabled students to accurately understand and use words and their meanings. Without adequate vocabulary, students might have struggled to construct coherent sentences, phrases, and utterances, which could have hindered their ability to write, read, and communicate effectively in English.

(M. F. Patel, 2008) in (Stkip et al., 2024) also explained that vocabulary mastery was urgently needed in supporting language skills, because vocabulary was the foundation of communication in all aspects of English (listening, speaking, reading, and writing). Without sufficient vocabulary, students faced difficulties in understanding texts, expressing ideas, and interacting effectively.

Based on the above statement, it could be concluded that vocabulary mastery played a crucial role in the success of learning English as a foreign language. As emphasized by Nation (2001) in Idayani & Sailun (2024), vocabulary mastery was essential because it enabled students to understand and use words accurately, which

supported their ability to construct coherent sentences and communicate effectively. Similarly, Patel (2008) in Stkip et al. (2024) stated that vocabulary mastery was urgently needed as the foundation of all language skills, including listening, speaking, reading, and writing. Without sufficient vocabulary, students faced serious obstacles in comprehending texts, expressing ideas, and engaging in communication. Taken together, both views highlight that vocabulary mastery was the backbone of language proficiency and a key determinant of students' success in English learning.

b. How to Test Vocabulary Mastery

In (Stkip et al., 2024) explained several ways to master vocabulary. The first was a pre-test. This test was given at the beginning, before students received instruction. The aim was to measure students' initial vocabulary skills before the learning process began. The second was a post-test. This test was given after the learning process was complete, with the aim of measuring students' ability to understand the material as well as any improvement in their vocabulary. The third was a multiple-choice test, and the last was a fill-in-the-blank test.

In (Aminun Omolu & Marhum, 2022) also explained that the way to measure students' vocabulary skills was by conducting tests. There were several tests that could be used, namely pre-tests, post-tests, multiple-choice tests, fill-in-the-blank tests, and matching tests.

Based on the above statement, it could be concluded that students' vocabulary mastery could be measured through various types of tests. Stkip et al. emphasized the use of pre-tests and post-tests to identify students' initial abilities and their progress after learning, along with multiple-choice and fill-in-the-blank tests. Meanwhile, Aminun Omolu & Marhum added that, besides these forms, matching tests could also be applied. Therefore, both perspectives highlighted that the use of diverse test formats played

an important role in assessing students' vocabulary skills more comprehensively.

2.1.4. Learning Media

a. Definition of Learning Media

According to (Aryad, 2016) in (Hasanah Lubis et al., 2023), learning media referred to the components of a student's surroundings that promoted learning. Learning aids could be defined as any tool that teachers use to communicate with students and vice versa.

b. Benefits of Learning Media

In (K. Hidayati et al., 2024) explained that learning media played a crucial role in the learning and teaching process. It could be used to convey messages to students and helped them understand what educators were saying (Batlawi & Hamid, 2022). Shafrillia et al. (2022) suggested that individuals could develop critical thinking skills through intentional exercises or situation. Hendi et al. (2020) defined critical thinking as the ability to answer problems by focusing on the process and stages followed, which could be accounted for.

In (Hasanah Lubis et al., 2023) also explained that the benefits of learning media included the ability to record certain items or occurrences. Capturing important events or uncommon goods in photos, films, video, or audio allowed them to be kept and retrieved later. The teacher can use video footage to describe how a rare solar eclipse occurred. Teachers could use visual aids to simplify abstract and concrete learning content, promoting mastery and eliminating linguistic barriers. Educational resources could assist in displaying huge or little objects in the classroom. And also using information media could boost students' motivation and interest in learning.

Based on the statement above, it could be understood that learning media provided various substantial benefits to the educational process. According to several researchers, learning

media was an important instrument for transmitting ideas to students and improving their grasp of educational topics, while also promoting critical thinking abilities and creativity. Learning media is very useful for collecting and archiving unusual events or phenomena using multiple formats such as images, films, videos, and audio, allowing teachers to offer these materials for future reference. Furthermore, it simplified both abstract and tangible concepts, making them more accessible to pupils and overcoming linguistic hurdles. The use of learning media also enabled teachers to effectively present objects of varying sizes within the classroom setting. Perhaps most importantly, it played a vital role.

c. Criteria for Selecting Learning Media

Susilana, R., & Riyana, C. (2009: 65) in (Mansur & Utama, 2021) proposed the criteria model for selecting appropriate learning media, which included material conformity, student characteristics, learning style, and supporting facilities. To evaluate the suitability of learning media selection, four factors were used: compliance with the subject, student characteristics, learning style, and supporting facilities. These criteria were reviewed summatively.

In (Hasanah Lubis et al., 2023) explained that some of the criteria for selecting learning media considered its ease of use as a top priority. When choosing educational resources, accessibility and convenience of use were top priorities. Second, consider the expense. Using IT technology for learning could be costly due to the need to purchase, maintain, and upgrade equipment to remain current. Third, amenities were offered. Effective use of available teaching materials was essential for the instructor to facilitate learning. Fourth, an interactive environment. A healthy educational atmosphere promoted two-way contact between teachers and students. Fifth, organizational support. Wina Sanjaya (2008) emphasized the importance of organizational support in promoting effective learning tools.

Based on the above statement, it could be concluded that the criteria for selecting learning media include several important characteristics that educators had to examine. Material conformance, student characteristics, learning styles, and supporting facilities were all examined summatively to provide the best educational outcomes. Furthermore, the selection process promotes media usability and accessibility while taking cost into account, especially for IT-based solutions that required continuous maintenance and updates. The availability of facilities was critical, as educators had to properly use current teaching resources. Furthermore, the requirements underlined the necessity of fostering an engaged atmosphere that allowed for meaningful two-way contact between educators and students. Finally, Wina Sanjaya emphasized the importance of organizational support for successful learning implementation.

2.1.5. Merdeka Curriculum

a. Definition of Merdeka Curriculum

In (Ni & Nuzilatus Shoimah, 2024) explained that the Merdeka Curriculum was a new curriculum with varied learning opportunities, and the content will be optimized so that students had adequate time to develop concepts and strengthen competencies. The Independent Curriculum aimed to create a curriculum that was more relevant to students' needs and to gave teachers the freedom to choose various learning tools so that learning could be tailored to students' learning needs and interests, as well as to develop more interesting learning materials to create quality learning that meets the needs of students and the teaching environment.

In (Witraguna et al., 2024) also explained that the Merdeka curriculum addressed post-pandemic education concerns by promoting independent learning (Abidin et al., 2023; Ardianti & Amalia, 2022). Daga (2021) and Mulyadi et al. (2022) defined

independent learning as students' ability to think freely, innovate, learn autonomously, and be creative.

Based on the above statement, it could be concluded that the Merdeka Curriculum was an innovative educational framework meant to overcome post-pandemic learning issues by optimizing content and allowing for flexible deployment. It provided a variety of learning opportunities that gave students enough time to develop concepts and enhance competencies, while also giving teachers the opportunity to choose appropriate learning tools and create engaging materials based on students' particular needs and interests. At its core, the Merdeka Curriculum promoted independent learning by developing students' ability to think freely, innovate, learn autonomously, and express creativity, resulting in a more relevant and high-quality educational experience that effectively addressed both student needs and teaching environment constraints.

b. Principles of the Merdeka Curriculum

(Vhalery, 2022) in (Hajar et al., 2024) explained that the principle of the independent curriculum was that it was student-centered. The teacher acted as a facilitator, providing guidance and assistance but still providing opportunities for students to learn independently. This could promote self-directed learning that was collaborative, adaptable, creative, and critical.

In (Astid Putera, 2023) also explained that some of the principles of the independent curriculum are that learning was adapted to the stage of development and achievement of students, the context of learning was based on the environment, culture, and character of students, and finally, the focus was on the sustainability of education and future development.

Based on the above statement, it could be concluded that the principle of the Merdeka curriculum emphasized student-centered learning, with the teacher acting as a facilitator, guiding and

assisting students while encouraging independent learning. This encouraged independent learning that was collaborative, adaptive, creative, and critical. In addition, learning is tailored to the child's phase of development and achievement, taking into account their environment, culture, and character. Finally, the curriculum prioritized relevance and long-term impact through continuous education and development.

c. Characteristics of the Merdeka Curriculum

In (Madu et al., 2024) explained that the Merdeka curriculum had various characteristics, including skills and character development: The Merdeka curriculum sought to develop students' diverse skills and character through various school-based activities. The second principle was to focus on key content: The material taught is fundamental and vital, so learning was more focused, and students could concentrate on understanding concepts rather than simply completing class hours. The third was flexible learning, which allowed educators to adapt appropriate learning techniques based on changing school situations.

In (Eugenio et al., 2024) also explained that the Merdeka curriculum has various qualities, the first of which was skill and character development. This curriculum focused on the development of various abilities and character traits through school-based activities. The second was to concentrate on the main material: Learning materials were designed to focus on crucial basic principles so that students might really comprehend and master the content rather than simply complete lesson hours. The third option was flexible learning: Merdeka Curriculum implementation adjusted to school settings, giving teachers the opportunity to choose the most effective learning techniques for their students.

Based on the above statement, it could be concluded that the Merdeka Curriculum emphasized three key characteristics: skill and character development, a focus on essential learning content, and flexible learning approaches. Additionally, the curriculum prioritized fundamental concepts, ensuring students deeply understood the material rather than simply completing lesson hours.

2.1.6. Conventional Dictionary

a. Definition of Conventional Dictionary

In (Elsner & Needle, 2023) also explained that a conventional dictionary was defined as a traditional bilingual dictionary in the form of a printed/written resource, containing a list of words and their meanings or equivalents in another language. This dictionary was designed to help people understand and translate words, especially in an educational context.

In (Lew, 2024) also explained that a conventional dictionary was defined as a traditional dictionary in printed form, arranged alphabetically with headwords, followed by definitions, grammatical information, and examples of usage.

Based on the above statement, it could be concluded that a conventional dictionary was generally defined as a traditional printed resource that provided systematic information about words. Elsner & Needle emphasized its bilingual function, serving as a printed or written tool that listed words and their equivalents to support understanding and translation, especially in educational contexts. Meanwhile, Lew highlighted its monolingual structure, arranged alphabetically with headwords and enriched with definitions, grammatical details, and usage examples. Taken together, these perspectives showed that a conventional dictionary was both a bilingual and monolingual printed reference, designed to support language comprehension, translation, and learning through structured and reliable lexical information.

b. The Role of Conventional Dictionaries

In (Lew, 2024) explained that conventional dictionaries were originally used for three main purposes: (1) text comprehension, (2) text production, and (3) text translation. These dictionaries served to help understand difficult words, choose the right words for writing, and find equivalents in other languages.

In (Elsner & Needle, 2023) also explained that conventional dictionaries were considered important in language communities with limited resources.

Based on the above statement, it could be concluded that conventional dictionaries played a crucial role in supporting language learning and use. Lew emphasized that they were originally designed for text comprehension, text production, and text translation, functioning as tools to understand difficult words, select appropriate vocabulary, and find equivalents in other languages. Meanwhile, Elsner & Needle highlighted their importance for low-resource language communities, where such dictionaries remained essential for education and preservation. Together, these views showed that conventional dictionaries were valuable not only for individual language skills but also for sustaining linguistic communities.

c. Weaknesses of Conventional Dictionaries

In (Wababa, 2024) explained that there were several disadvantages to conventional dictionaries, namely that conventional dictionaries were considered impractical because searching for words took longer than digital dictionaries, which had a quick search feature. In addition, limited printing space meant that dictionaries could not contain too many words, idioms, or diverse example sentences. Another disadvantage was the delay in updating; language continued to evolve, but printed dictionaries required new editions, which took a long time and incurred significant costs.

In (Susilana et al., 2022) also explained that conventional dictionaries were considered impractical because searching for terms was time-consuming and quite complicated. In addition, limited printing space meant that conventional dictionaries could not provide as much information as quickly as digital dictionaries.

Based on the above statement, it could be concluded that conventional dictionaries had significant limitations compared to digital ones. Both emphasized that searching for words in printed dictionaries was time-consuming and impractical, while digital dictionaries offered faster access. They also pointed out the restriction of printing space, which limited the amount of vocabulary, idioms, and examples provided. Moreover, Wababa highlighted the costly and slow process of updating printed editions as another drawback. Taken together, these views showed that conventional dictionaries had been less efficient and less adaptable to the evolving nature of language.

2.1.7. Picture Dictionary

a. Definition of Picture Dictionary

(Kara & Kucuk, 2023; Suniyasih et al., 2020) in (Menggo et al., 2024) explained that the picture dictionary was the first step in a word-by-word development process. It offered a wide range of printed and digital educational resources for all grade levels.

(Smith et al., 2016) in (Suniyasih et al., 2020) also explained that a picture dictionary was a sort of dictionary that used images to illustrate the meanings of words, with a primary focus on nouns.

Based on the above statement, it could be concluded that a picture dictionary emerged as a foundational educational tool designed to support word development across various grade levels. These comprehensive resources leveraged visual illustrations, particularly for nouns, to help learners understand word meanings through both printed and digital formats. By presenting words alongside corresponding images, picture dictionaries served as an

innovative and accessible first step in language learning and vocabulary acquisition, facilitating easier comprehension and engagement for students at different educational stages.

b. Benefits of Picture in the Dictionary

(Klosa, 2015; Lew et al., 2018) in (Dziemianko, 2024) argued that the benefits of pictures in the dictionary included supporting definitions and assisting comprehension. The advantageous role of adding pictures to text was more thoroughly demonstrated in non-lexicographic studies of decoding and vocabulary learning (reviewed by Ramezanali et al., 2021). Their findings corroborated the multimedia theory that individuals learn better from words and visuals than from words alone (Mayer, 2021, p.57). Such findings are also consistent with the dual-coding hypothesis, which claimed that presenting both verbal and visual materials allowed learners to develop referential linkages between the two types of mental representation, hence improving learning (e.g., Paivio, 2013).

According to Wright In (Lodo et al., 2024), the picture could motivate students to learn to write and speak by drawing their attention to the teaching and learning process, which was one of its benefits.

Based on the above statement, it could be concluded that pictures in dictionaries and educational materials enhanced learning by supporting comprehension through visual representations, aligning with multimedia theory and the dual-coding hypothesis. They not only improved cognitive processing but also motivate students by drawing their attention to the learning process, making language acquisition more engaging and effective.

c. The Importance of an English Picture Dictionary

In (Pendidikan & Pengajaran, 2022) explained that the study indicated that a dictionary was urgently needed. This is also consistent with prior studies, which found that dictionaries played a significant role in language acquisition (Alhatmi, 2019; Muslimin

and Surjono, 2018; Rahim and Chun, 2017). They also concluded that pupils required high-quality dictionaries to get reliable information. Previous research has indicated that dictionaries could assist students in mastering their primary language vocabulary in a foreign language (Barham, 2017). Previously, various studies were undertaken on dictionary development. According to Sibanda (2019), an effective dictionary should translate the target language into the students' native language. Research (Rahim & Chun, 2017; Muslimin & Surjono, 2018; Santosa & Andriyadi, 2019) indicated that using a visual dictionary could improve students' vocabulary mastery.

d. Advantages of English Picture Dictionary

The advantage of a picture dictionary, according to Dwimawanti in (Anggraeni et al., 2021), was that it contained not only text and words but also simple pictures that engaged students' imaginations about the meaning of vocabulary. And also in the journal, it concluded that the use of pictures in the dictionary is effective in increasing students' vocabulary.

In (Kara & Kucuk, 2023) also explained that the use of pictures in this dictionary offered several advantages in teaching English in a fun and effective way for English teachers. With pictures, it can bring real-world events into the classroom setting.

Based on the above statement, it could be concluded that a picture dictionary had several advantages, including engaging students' imaginations, making vocabulary learning more effective, and giving a fun and dynamic way to teach English. Additionally, pictures helped bring real-world settings into the classroom, which enhanced students' understanding.

2.1.8. Canva Application

a. Definition of Canva Application

In (Anggraeni & Pentury, 2022) explained that Canva was a web-based graphic design application for creating digital and

printed pictures for social media, blog articles, and marketing materials (Deford et al., 2017). Canva allowed users to design layouts from scratch or start with pre-loaded templates that included thematic fonts, objects, color palettes, text boxes, and platform-specific proportions. Users could exchange designs and work with team members to develop visually appealing marketing materials for their target audience.

Tanjung & Faiza (2019, p. 80) in (Melinia & Nugroho, 2022) identified Canva as one of the leading technology applications. Canva was a web-based design platform that provided a wide range of tools, including presentations, resumes, flyers, posters, logos, designs, infographics, banners, bookmarks, notifications, and more. Canva offered a variety of presentation categories, including unique introductions, education, business, technology, animation, advertising, and agendas. (Astuti, 2021, page 9).

Based on the above statement, it could be concluded that Canva was a versatile web-based graphic design application that provided both pre-loaded templates and the ability to create custom designs. It offered tools for creating a variety of digital and printed items, including as presentations, marketing materials, infographics, posters, and more. Canva's capabilities spanned multiple sectors, including education, business, technology, and advertising, making it a top technology tool that allowed users to produce visually appealing material and work with teammates.

b. Benefits of Using the Canva Application

In (Fauziyah et al., 2022) explained that Canva provided several significant benefits in a learning environment. First, Canva had an attractive design and is easy to use, making it accessible on a variety of devices, including cell phones and laptops. Secondly, it drastically increased the creativity of teachers and students in creating interactive learning materials. Third, it was highly effective as it saved time during the design process by providing

millions of photos, photo filters, icons, and various types of fonts. Fourth, Canva's attractive and dynamic visual appearance helped students become more interested in learning, especially writing. Fifth, online learning becomes more effective when students can share ideas and work on the same platform.

In (Novita Sari Hutapea et al., 2024) also explained that the Canva app's benefits were clearly described, demonstrating how it made it easier for students to generate study materials such as presentations and posters thanks to its user-friendly interface and extensive library of templates. This application also improved student engagement by making the design process more creative and enjoyable while also encouraging critical thinking and teamwork. Canva reduced anxiety associated with academic assignments while also increased student enthusiasm and confidence, making it a transformative tool for integrating digital literacy in education.

Based on the statements from Fauziyah et al. (2022) and Novita Sari Hutapea et al. (2024), it can be concluded that Canva's user-friendly layout, creative features, and cross-device accessibility made it an extremely useful tool in educational settings. It improved both teaching and learning by allowing students to create visually beautiful and interactive materials, as well as encouraging creativity, teamwork, and critical thinking. Furthermore, Canva promoted effective and interesting online learning, reduced anxiety about academic tasks, and enhanced student confidence, making it an invaluable platform for boosting digital literacy in education.

c. Canva Application Features

In (Zentia Putri, 2023) explained that there were various features in the Canva app. There are millions of images, graphics, and fonts available. There were also various tools such as presentations, resumes, posters, flyers, brochures, infographics, banners, bookmarks, newsletters, and so on. Canva provided a variety of

presentation types, including those related to education, business, advertising, and technology.

In (Febriyanti & Haryanto, 2024) explained that the Canva application included specifications for making numerous types of graphics. These visuals can be utilized for social media, presentations, and learning purposes (Deer, 2021). This app could be used for a variety of tasks, including creating resumes, presentations, brochures, invitations, cards, logos, and videos.

Based on the above statement, it could be concluded that Canva was a multipurpose design program that came with a variety of features and tools. It provided access to millions of design elements and allowed for the creation of a wide range of visual content, including presentations, resumes, brochures, invites, and more. Canva was used for a variety of uses, including education, business, advertising, social media, and learning, making it an excellent platform for producing professional and creative graphics.

d. Advantages of the Canva Application

In (R. Hidayati, 2023) explained that there were various advantages to using Canva during the learning process. It was a fun and engaging medium that sparked children's interest in learning. Canva also boosted students' enthusiasm, especially for English projects. Its user-friendly interface allowed students to develop their own projects with ease. Furthermore, the platform encouraged innovation by offering a diverse set of templates and design alternatives. Canva also provided access to a variety of materials, such as photos, graphics, and fonts, to help students create visually appealing work.

In (Rorimpandey & Fatwa, 2023) also explained that the Canva application provided various advantages in the learning process. It was simple for kids to use, allowing them to quickly grasp its functions. Canva also improved students' creativity, notably in writing advertisement messages, through its large range of

templates and design features. As a visual learning tool, it enhanced students' comprehension of material. Canva also promoted the integration of technology in education, which aligned with 21st-century digital skills. Research also demonstrated that students who utilized Canva wrote high-quality advertisement texts, as seen by their great assessment outcomes.

Based on the above statement, it could be concluded that Canva provided various advantages during the learning process. It was a fun, user-friendly application that boosts student engagement, creativity, and comprehension, particularly in English and advertisement text tasks. Canva promoted visual learning through a variety of templates and design elements, making knowledge more accessible and appealing. Furthermore, its incorporation into education encouraged the development of 21st-century digital abilities, with research indicating that students who use Canva generated high-quality work with good evaluation scores.

e. Guide to Open a picture Dictionary (Canva Link on WhatsApp)

Preparation

- Students had to make sure their phone/laptop was connected to the internet.
- WhatsApp and a browser (Chrome/Safari/Edge) had to be available.

Steps on a Mobile Phone (Android/iPhone)

- Students opened the class WhatsApp group.
- tapped the Canva link shared by the teacher.
- If an option appeared such as “Open in browser / Open in Canva,” they chose the browser.
- Once the Canva page loaded, they scrolled down until they found the button/link to open the dictionary/application (for example “Open,” “Open website,” “View more,” or another button provided by the teacher).

- They tapped the button/link to access the dictionary.
- Navigation in the dictionary:
 - Swiped left/right to move pages.
 - Pinched to zoom in/out.
 - If an icon grid/page was available, they tapped it to jump to a specific page (e.g., letter/theme).
- If a search bar was available, they typed the word to find vocabulary.
- Students wrote down important vocabulary in their notebooks according to the teacher's instructions.

2.1.9. ADDIE Model

In (Spatioti et al., 2022) explained that the ADDIE model was a teaching model widely used by many educational designers and training programmers to develop education and training programs. It appeared in 1975 at the University of Florida. Its name was an acronym, which depicted the five basic steps of this model for the design and development of the learning experience, which are as follows: Analysis, Design, Development, Implementation, and Evaluation. In the ADDIE model, each step had a result that powered the next step. This sequence, however, does not require strict, linear progression in the steps (e.g., Johnson-Barlow and Lehnen and Kakkou).

In (Afidah et al., 2023) also explained that ADDIE model was the basis of the resulting paradigm of development. The ADDIE Model was one of the most common models that was used in the instructional design field to produce an effective design. The procedure that was in this study adapted ADDIE, which consisted of five steps. They were (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation.

According to Rossett and Sheldon (2001) in (Mariam & Nam, 2019), *analysis* was the process of determining a course of action. During this phase, the learning problem was defined, goals and objectives were established, and the audience's needs are identified. To accomplish this,

Training Needs Analysis (TNA) and Needs Analysis/Assessment were frequently conducted. The TNA was used to determine if a learning approach was effective in solving a specific problem (Tovey, 1997). A demands Analysis/Assessment identified client demands for learning, training, and performance (DeSimone, Werner 2012). *Design* involved creating lesson plans, selecting assessment tools, and designing exercises and content for delivery. This process should be orderly to develop strategies that meet established goals. Designers were encouraged to start with a task analysis to outline instructional outcomes and organize components into a sequence. The result was a draft that helped ensure no critical elements of the lesson were overlooked (Jonassen, Tessmer, & Hannum, 1999). The *development* phase was a productive reflection of the design phase, while also aligning with the analysis phase. It involves creating content and learning materials based on the design plan. Instructional developers elaborate on content through storyboards and also test the materials and procedures (Dousay & Logan, 2011). During *implementation* phase, everything planned and designed in previous sections were put into action. This phase could be thought as the training phase. Training was done in this phase to the target people. Here in this phase, the training materials were distributed to the student group, lecture was delivered, tests are taken. After delivery, the effectiveness of the training materials was evaluated (Dousay & Logan, 2011).

Based on the above statement, it could be understood that the ADDIE model encompassed five key phases: Analysis, Design, Development, Implementation, and Evaluation. The analysis phase defined the learning problem, set goals, and identified audience needs through training needs analysis and needs assessment. The design phase focused on creating structured lesson plans and assessment tools, with an emphasis on task analysis to ensure all critical elements were included. The development phase materialized the design by producing content and testing materials. Finally, the implementation phase put the

planned strategies into action, delivering training and evaluating the effectiveness of the materials used. Overall, each phase built upon the previous one to create an effective learning experience.

2.1.10. Classroom Action Research (CAR)

Creswell in (Mustakim Hadi et al., 2024) argued that action research was the most applicable and practical design approach. Action researchers investigated a practical problem with the goal of creating a solution to it. It indicated that having a practical design made it easier for the researcher to tackle a problem that occurred and accomplish the intended results.

According to Kemmis and McTaggart (1998) in (Azahra et al., 2024) argued that the core component of creating Class Action Research consisted of four steps: planning, acting, observing, and reflecting in one cycle. Depending on the difficulty of the problem, a researcher might have gone through more than one or two cycles. Each cycle was followed by another, with the previous cycle serving as the basis for determining what should have been done in the following cycle.

Burns (2010) and McNiff and Whitehead's (2010) in (Runnels & O'dwyer, 2020) also argued that the core component of creating Class Action Research consisted of: (1) Study and Plan, (2) Collect and Analyze Evidence, (3) Take Action, and (4) Reflect. Since the project involved classroom observations and implementation of a learning cycle into a different educational environment from where it was developed, Study and Plan focused on ensuring an understanding of the learning cycle and the context of its usage. In the Collect and Analyze Evidence phase, the classroom observations were conducted and the general learning cycle implementation guide was produced. In the Take Action phase, the learning cycle was implemented in the second learning context. Reflections on the entire process were recorded and were discussed in the final phase.

Based on the statement above, it could be understood that in classroom action research, it had a cyclical component consisting of

interrelated steps. Kemmis and McTaggart identified four main steps: planning, action, observation, and reflection. Each step played an important role in improving learning practices, with an emphasis on careful planning and reflection for continuous improvement. Meanwhile, Burns and his colleagues added detail by enumerating the steps: study and plan, gather and analyze evidence, take action, and reflect. Researchers emphasized the importance of understanding the context before implementing action and collecting data through classroom observation. Overall, both approaches highlighted the importance of systematic cycles in classroom action research to improve students' learning experiences through continuous reflection and improvement.

2.1.11. Teacher Observation Aspects

There were several aspects used to observe teachers in relation to the research that was conducted. The explanation could be seen below:

1. How do you assess students' vocabulary skills in class?

An expert named Tarigan (2021) in (Asrida et al., 2024) explained that assessing students' vocabulary abilities was very important for identifying problems in learning and variations in student abilities within the classroom. He also explained that students with a limited vocabulary frequently had difficulties in learning English, necessitating a concentration on vocabulary acquisition to increase overall language ability. Hornby (2000) defined mastery as a full understanding of vocabulary and communication skills. Based on the above statement that assessing students' vocabulary skills was very important for identifying problems in learning, the researcher made questions related to this the first questions asked to the teacher so that the researcher could understand their vocabulary skills.

2. What difficulties do students face in mastering vocabulary during the learning process?

Noralievna, K. S. (2022) in (Ryan et al., 2024) explained the importance of interaction between teachers and students to improve learning effectiveness. Through interaction between the two, teachers could identify the difficulties of each student and use this as a basis for designing learning solutions. In line with the above statement, the researcher placed the question about students' difficulties in the learning process as the second question after asking about how teachers assess students' vocabulary. These two issues were related to solutions in learning.

3. Do students often use new vocabulary?

Nation (2001) in (Numonova, 2024) explained that the best words were learned by using them regularly and in a variety of settings. Stories, drama, and problem-solving activities allowed students to employ new words in context, which improved their grasp of the vocabulary. This led the researcher to go further by questioning whether students used new vocabulary in their learning and were not passive by only mentioning a few words they knew.

4. What subjects do students find difficult to learn?

This question was a follow-up to the previous question. The researcher sought to explore further what material teachers found particularly difficult for students to learn so that the researcher could gain a deeper understanding of students' English language learning.

5. What teaching methods do you use in class?

In (Nodira et al., 2025) explained that teaching methods were a collection of broad ideas and practices utilized by teachers to assist pupils in achieving their learning objectives. Choosing the right method was critical because it influenced the efficacy of the teaching and learning process, student engagement, and learning results. Effective teaching methods allowed pupils to master the

subject and apply it in specific settings. This prompted the researcher to ask teachers further questions about the teaching methods they typically used. This helped the researcher understand whether the methods used were relevant or needed to be adjusted to suit students' abilities.

6. Does everyone bring a dictionary to class?

This question was more specific to the learning aids used by students, namely dictionaries. The researchers wanted to know whether students brought dictionaries to class in order to map learning habits and the availability of learning resources prior to the implementation of picture dictionaries. If most students did not bring dictionaries, the researcher could identify the reasons behind this, such as low interest in learning, economic constraints, or a lack of habit of using dictionaries.

7. What do they actually need to improve their vocabulary?

This question was included in the formulation of solutions, and, as explained in the previous chapter, student needs analysis was important in learning. Teachers, as those who deal directly with students, had a better awareness of the kind of aid or media that were most beneficial in increasing students' vocabulary.

8. What are your expectations regarding the product I am offering?

The researcher asked the final question about what the teacher expected from the product the researcher was offering after had explained what had been developed that could be useful for students in the future. The teachers' answers to this question were also important for the researcher in order to obtain direct feedback from those involved in the learning process.

The researchers felt that these eight questions were sufficient to gather comprehensive information about students' vocabulary skills, the difficulties they faced, their learning habits, the teaching methods used by teachers, the availability of learning resources, learning needs, and

teachers' expectations for the media to be developed. The information obtained from all these questions provided a strong foundation for researchers in designing, developing, and refining learning products so that they were targeted and aligned with on-the-ground needs.

2.1.12. Aspects of Teacher Observation

There were several aspects used to observe teachers. They were explained as follows:

1. Teaching Method

As explained in the teacher interview section regarding teaching methods, which explained that teaching methods were a collection of broad ideas and practices utilized by teachers to assist pupils in achieving their learning objectives. Choosing the right method was critical because it influenced the efficacy of the teaching and learning process, student engagement, and learning results. Effective teaching methods allowed pupils to master the subject and apply it in specific settings. This prompted the researcher to ask teachers further questions about the teaching methods they typically used (Nodira et al., 2025). This helped the researcher understand whether the methods used were relevant or needed to be adjusted to suit students' abilities.

Therefore, researchers understood that it was important to begin observations in order to determine whether the methods used were relevant to the students' needs.

2. Use of Teaching Media

After observing the teachers' teaching methods, the researcher also understood that teaching media was important in the learning process to help teachers convey material more clearly and interestingly, and to make learning more interactive and less monotonous (Kusmaryono & Basir, 2024).

Therefore, the use of learning media in the classroom was the second thing to observe.

3. Use of English in Teaching

Zhang and Lu (2022) explained that teachers' use of English in the classroom was crucial for familiarizing students with certain vocabulary, sentence structures, and pronunciation. However, teachers could also use students' first language in a limited way to clarify the meaning of difficult vocabulary.

4. Introduced New Vocabulary

Rahimi (2023) explained that introducing new vocabulary should have been done consistently, for example by introducing the word, providing a simple definition, providing examples of its use in sentences, and connecting it to images or visual context. This could help students understand and remember the word better.

5. Explained the Meaning and Usage

The meaning and use of vocabulary could not be achieved through translation alone; it had to be supplemented with examples from various contexts. In this way, students not only learned the meaning of words, but also how they were used in different situations (Alqahtani dan Arafat, 2023).

6. Vocabulary Teaching Strategies

Ayana and Mereba (2024) had explained that the use of vocabulary learning strategies such as guessing meaning from context, using keywords, or semantic strategies significantly increased students' vocabulary achievement and motivation in their quantitative research.

7. Student Engagement

In (De Bruijn-Smolters & Prinsen, 2024) explained that student involvement referred to the effort that students put into their learning. Engaged students were more likely to invest in their study, leading to improved outcomes and greater engagement.

This was why student engagement was observed in the learning process after teachers use teaching methods, learning media, and material delivery. These four elements were interconnected,

because effective teaching approaches, when combined with suitable learning medium and clear presentation of material, could dramatically increase student engagement. High levels of student involvement, in turn, promote understanding and retention of content, resulting in improved learning outcomes. This reciprocal interaction leads to a more active, participatory, and student-centered learning experience.

8. Formative Assessment

In (Costa Akoyt, 2025) explained that formative assessment was very important in the learning process because teachers can monitor students' progress in learning and encouraged them to participate more actively in the learning process. This was the next thing that the researcher observed, namely whether teachers conduct formative assessment in learning.

9. Classroom Atmosphere

In (Zaripova Shaxnoza, 2025) explained that positive classroom atmosphere allowed students to thrive academically and socially, strengthened the relationship between teachers and students, and created a sense of safety and mutual respect in the classroom. In addition, an organized and attractive classroom improved student concentration and reduced distractions.

Therefore, the researcher also observed the situation/atmosphere created by the teacher to attract students' attention so that they would focus more on learning.

10. Use of Technology

The final question concerned the use of technology in the learning process. In (Nuriddinov, 2024) explained that technology was viewed as a significant tool for increasing instructional effectiveness and student progress. The use of technology in education might have boosted students' motivation to learn and comprehend the topic. Teachers could employ technology-based teaching materials to enhance the learning process in the classroom.

So, this was also important for teachers to observe during the learning process

2.1.13. Aspects of Student Observation

There were several aspects used to observe students in class, namely:

1. Active participation

In (Aulia et al., 2024) explained that active participation in class entailed more than just physical presence; it also included active participation, profound knowledge, and inner drive in the learning process. When students participated actively, their conceptual understanding, learning enthusiasm, and academic accomplishment improved significantly.

Based on the above statement, it could be understood that student participation in the learning process in the classroom was important to observe because it was related to improving their academic performance. Therefore, the researcher placed it first in order to observe.

2. Ability to recognize the meaning of words

After the researcher had observed student participation in class (aspect 1), the next step was to assess their ability to understand the meaning of words, because active participation would be limited if students have difficulty understanding the vocabulary used by the teacher or in the learning materials.

Herawati et al. (2018) in (Yunita et al., 2024) explained that word recognition skills could be divided into two categories: innate skills and skills learned via practice. Reading abilities assisted students in obtaining information for writing tasks (Beauty et al., 2023). Expanding one's vocabulary was crucial for improving language ability (Aravind et al., 2023). Students' knowledge of vocabulary could help them overcome learning problems (Chang et al., 2023).

Based on the above statement, it could be understood that word recognition skills can help students obtain information for writing

assignments, and these results were very important for improving language skills. Therefore, the researchers placed this as the second aspect after observing whether the students' participation was active or not.

3. Ability to pronounce vocabulary

After the researcher had observed student participation (aspect 1) and the ability to recognize the meaning of words (aspect 2), the third question focused on the ability to pronounce familiar vocabulary. This was important because recognizing the meaning of words was not enough if students cannot pronounce them correctly. In (Wahid et al., 2025) explained that correct pronunciation was essential for efficient communication, particularly when learning English. Listeners could immediately notice pronunciation, which was an important aspect of speaking skills. When someone speaks, incorrect pronunciation can cause confusion and misunderstanding.

Therefore, with the interconnection between several aspects, the researcher had made “ability to pronounce vocabulary” the third aspect.

4. Enthusiasm for learning

The last one was enthusiasm for learning. Students' enthusiasm could be demonstrated in their eagerness to learn throughout class. Eagerness to learn was concerned with more than just knowledge transfer; it also involved developing pupils' potential, sparking curiosity, and providing opportunities for creativity and critical thinking (Susanto, 2024). This was important to observe, because language skills would not develop optimally if students did not have a high level of interest or eagerness to learn.

The researcher chose to observe these four aspects because understood the focus and objective of the researcher, which was to develop a picture dictionary. Therefore, the aspects observed were those

that were most relevant and had a direct impact on the successful use of this medium.

2.1.14. Aspects of Material Validation

There were several assessment aspects provided by the researcher for material expert and adjusted to indicators from several sources. The researcher chose these ten for several reasons, here was the explanation:

1. Material Suitability

In (Moore et al., 2023) explained that in the field of education, the development of curriculum-based material content was extremely significant. The curriculum provided not only as a guide, but also as a framework to ensure that the learning process was structured and effective. In this context, numerous key points underscored the importance of curriculum content preparation. First, the curriculum provided a clear learning guide for both teachers and students. Second, the curriculum development process added to educational standards. With the same curriculum, all students in all schools could receive an equitable education, and curriculum-based materials could be tailored to students' needs and contexts. "Convert this sentence into English.

Based on the statement above, the researcher understood that it was important that the contents of the picture dictionary were also in accordance with the curriculum used by students, and specifically this dictionary was adjusted to the contents of the material from the independent curriculum book.

2. Extent of Material Coverage

In (Zulia Fitri & Saifudin, 2024) explained that the scope of the material was assessed by matching the terminology used to the basic competencies and themes in the junior high school English curriculum. This ensured that the material delivered was relevant and consistent with what students should be studying.

Based on this statement, the researcher knew that the scope of the material content had to be relevant and in accordance with what

students should learn, so the researcher made this one of the indicators for assessing material validation to find out whether the contents of the picture dictionary created were in accordance with the material that students should learn.

3. Level of Difficulty of Material

In (Teng & Mizumoto, 2024) also explained that the material and its level of difficulty was adjusted to the cognitive abilities of seventh-grade students, neither too easy nor too challenging. This change was essential to keep students challenged and motivated to learn, rather than feeling distracted or bored. Learning materials were more effective and relevant when they considered students' cognitive abilities.

4. Accuracy of Vocabulary Selection

Wardana (2023) in (Bashori et al., 2024) explained that choosing the right language had a positive and significant impact on the quality of their verbal communication. Correct word choice not only allowed for more fluent discourse but also increased language confidence, which was crucial for social and academic relationships. Because choosing the right words was important, the researcher used this as an assessment of material validation.

5. Linguistic Accuracy

In (Mohammed Ibrahim, 2022) explained that linguistic accuracy was a crucial part of language learning. Linguistic accuracy was a language learner's ability to apply grammatical structures, vocabulary, and phrases correctly and without error. The use of vocabulary, pronunciation and correct translation was also important in a dictionary, this was used as one of the assessments in material validation.

6. Suitability of Example Sentences

In (Jasper Degraeuwe, 2022) explained that this study described research that examined simplified example sentences with the goal of simplifying sentences containing complex terms to make them

more accessible to learners of all skill levels. This study underlined the significance of tailoring example sentences to the learner's needs.

The picture dictionary also included example sentences, simplified by researchers to facilitate student understanding. This also served as a validation assessment of the material, ensuring that the example sentences are appropriate and appropriate for the students' abilities.

7. Relevance of Images to Words and Image clarity

Octaberlina and Anggarini (2020) in (Liando et al., 2022) explained that children were drawn to pictures with a distinct form and bright colors. According to Nurdini (2018), pictures could be used as a form of learning medium, including static visuals. Using picture media can helped children explore more effectively by presenting detailed images.

Because what was being created was a picture dictionary, the pictures had to be relevant to the vocabulary listed, so this was also an assessment in validating the material.

8. Systematic and Coherent Presentation

The researcher created dictionary materials based on thematic themes based on the textbooks used by students.

9. Usefulness of Materials

The researcher created dictionary materials based on thematic themes based on the textbooks used by students. This made it easier for students to understand the dictionary's contents because it was tailored to the material being studied.

2.1.15. Aspects of Design Validation

The design expert provided an assessment based on the indicators given by the researcher. There were ten indicators that had been prepared, as follows:

1. Layout Suitability

Mayer (2021) explained that the harmonious placement of visual and text elements supported the principles of multimedia learning. A balanced layout made information easier to understand because students' attention was not randomly divided. Therefore, layout suitability was a crucial aspect of design validation, as a cluttered layout distracted students and reduced the effectiveness of the media.

2. Visual Clarity

According to Clark & Mayer (2016), visual clarity was part of the coherence principle, which involved avoiding blurry or irrelevant images to avoid confusion. Clear images helped students grasp vocabulary concepts directly. Therefore, the visual clarity aspect needed to be validated, as blurry images degraded the quality of visual learning.

3. Color Selection

Haris & Mayer (2022) showed that appropriate color selection influenced students' cognitive appeal and perception. Excessive contrasting colors could cause cognitive overload, while harmonious colors improved student focus. Therefore, color selection was a validating aspect of design to ensure visual comfort and effective communication

4. Typography Suitability

Lupton (2019) emphasized that typography determined the readability and accessibility of text. Overly complex fonts hindered student comprehension, while simple fonts sped up the reading process. Therefore, typographic suitability was crucial in design validation to ensure materials were appropriate for students' literacy levels.

5. Design Consistency

In Wong (2020) explained that consistency in design ensured uniformity in format, font size, and image style so that users could

quickly recognize information patterns. Inconsistency could easily fatigue and confuse readers. Therefore, design consistency was a crucial aspect of design validation to maintain the overall integration of learning media.

6. Visual Appeal

Schunk et al. (2021) emphasized that visual appeal increased learning motivation. An attractive design aroused students' curiosity and encouraged them to focus more on the material. Therefore, visual appeal was not only about aesthetics but also part of learning motivation related to the validity of learning instruments.

7. Image Size Compatibility

According to Paivio's (1986) dual coding theory, which continued to be developed in recent literature, proportional image size helped balance verbal and visual information. Images that were too small made interpretation difficult, while images that were too large could distract from the text. Therefore, image size compatibility needed to be validated to ensure optimal student comprehension.

8. Illustration Clarity

Schnotz & Bannert (2020) emphasized that illustrations should support the meaning and avoided multiple interpretations. Ambiguous illustrations could lead to misconceptions. Therefore, illustration clarity was an important aspect of design validation, as it directly related to the accuracy of conveying vocabulary meaning.

9. Image & Text Integration

Mayer (2009) explained that effective learning materials integrated text and images so that they complemented each other. When text and images were separated, students experienced split attention and had difficulty connecting the information. Therefore,

image and text integration was an important aspect of design validation to ensure coherence and comprehension.

10. Design Creativity

Plass & Pawar (2020) showed that design creativity encouraged students' curiosity and increased engagement with learning materials. Creative designs avoided monotony and provided innovative ways of presenting information. Therefore, design creativity was a crucial aspect of validation to ensure that learning media remained attractive and motivating.

2.1.16. Aspects of Language Validation

The language expert provided assessments based on indicators provided by the researcher. And below was an explanation of each aspect:

1. Spelling Accuracy

According to Smith (2020), spelling accuracy was very important in dictionary development because it increased the credibility and professionalism of the dictionary and made it easier for users to understand the intended words. Spelling errors could lead to confusion and misuse of words. Therefore, validating spelling accuracy was crucial to ensure the dictionary could be relied upon as an official and standard language reference source.

2. Meaning Accuracy

Dziemianko (2010) explained that accuracy of meaning or word definition in a dictionary had to match the context to make language learning effective. Incorrect meanings could confuse learners, especially those learning the language. Hence, validating meaning accuracy was necessary to make sure definitions corresponded to real-life English usage.

3. Simplicity of Vocabulary

A study from Frontiers (2022) showed that simplicity in vocabulary choice aimed to make dictionary words easy to understand, particularly for junior high school students. Simple and

straightforward language helped accelerate comprehension and learning. This made the validation of vocabulary simplicity important to keep the dictionary relevant to the cognitive needs of its intended users.

4. Clarity of Word Usage

Linguistic experts stated that clarity in word usage ensured that dictionary vocabulary could be applied in sentences without ambiguity. Validating clarity helped prevent multiple interpretations which could confuse readers.

5. Consistency of Terms

Language experts pointed out that consistency in terminology was vital in maintaining uniformity in word usage, thereby building a strong and clear understanding. Consistent terms facilitated knowledge transfer and minimized reader confusion.

6. Accuracy of Reading

Li (2019) noted that accurate phonetic representation, according to standard phonetic rules, was critical so that users could correctly pronounce and spell words. Validating this aspect supported users' oral communication skills.

7. Clarity of Definitions and Examples

Miller (2020) emphasized that dictionary definitions and example sentences had to be clear, concise, and free from multiple interpretations to ease the understanding of word use. Validation reduced confusion and increased learning efficiency.

8. Readability of Text

Research from Frontiers (2022) highlighted that good readability involved appropriate font size and clear layout so that dictionary texts did not confuse users and were easy to read. Validating readability ensured users felt comfortable using the dictionary as a learning tool

2.1 Relevant Research

One of the early studies by Marion (1964) in (Kara and Kucuk 2023b) suggested that picture dictionaries helped students recognize words and understood phonetic rules. This research paved the way for further understanding of how visual tools could facilitate the language learning process. Furthermore, Zawawi and Pillai (2022) stated that picture dictionaries allowed students to associate pictures with words, which made it easier for them to remember and use vocabulary in conversation. Another study by Suniyasih et al. (2020) in Indonesia showed that picture dictionaries were not only effective in expanding students' vocabulary capacity but also in increasing their motivation to learn English. This study emphasized that the use of visual tools in learning could create a more enjoyable and interactive learning atmosphere.

So, it was understood that the use of picture dictionaries in language learning had many benefits. Early research by Marion (1964) showed that picture dictionaries helped students recognize words and understand phonetic rules. Zawawi and Pillai (2022) added that the association of pictures with words made it easier for students to remember and use vocabulary. In addition, a study by Suniyasih et al. (2020) in Indonesia showed that picture dictionaries are not only effective in expanding students' vocabulary but also increasing their learning motivation, creating a more fun and interactive learning atmosphere.

2.3 Conceptual Framework

The research began with administrative preparations for permission to carry out a preliminary study at SMP Swasta Kristen Tomosa 1. This official permission aimed to ensure that the research runs with full support from the school. After that, it was continued with in-depth interviews with English teachers to collect information regarding the use of technology and especially English dictionaries in the classroom.

After conducting interviews, the researcher found problems in using the dictionary and then offered a solution, namely the use of a technology-based English picture dictionary supported by the Canva application.

The ADDIE approach was used in the development of this application through five stages, namely analyzing the needs of students and teachers, designing the application structure, developing the application prototype, implementing it in learning, and evaluating its effectiveness. The R&D method was applied to ensure the app was developed systematically and could be tested before it was widely used. Meanwhile, the Classroom Action Research (CAR) approach was used to observe changes in student behavior as well as the impact on their learning outcomes.

The research was designed in several main stages. The first stage was administrative preparation and initial data collection through interviews and observations. The second stage was needed analysis to identify problems faced by students and teachers. Next, the researcher designed and developed a prototype of the Canva app based on the results of the analysis. After that, the app was implemented in a seventh-grade lesson for a pilot test. This process was followed by evaluation and revision based on feedback from students and teachers. The results of each stage of the research were then analyzed and compiled in a final report containing conclusions and recommendations. With this approach, the researcher hoped that the developed app could be an effective solution in English learning at SMP Swasta Kristen Tomosa 1 School.

The research process could be seen in the framework:

