JURNAL INDRIA
Jurnal Ilmiah Pendidikan PraSekolah dan Sekolah Awal
Vol. 11 No. 1 Maret 2026
http://journal.umpo.ac.id/index.php/indria/index

The Application of Interactive Multimedia Learning Media to Improve Letter Recognition Ability in Group B Children at RA Al Munawarah

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Article Information

Article Hsitory
Received: Nov 25, 2025
Revised: Feb 13, 2026
Accepted: March 1, 2026

Keywords:
Early Childhood Education
Letter Recognition Skills
Interactive Multimedia

Abstrak

Pendidikan anak usia dini merupakan tahap pendidikan yang sangat penting dalam mengembangkan seluruh potensi anak secara optimal tanpa mengabaikan kondisi fisik dan psikisnya. Salah satu aspek perkembangan yang perlu mendapat perhatian khusus pada anak usia 5-6 tahun adalah kemampuan mengenal huruf sebagai dasar perkembangan keaksaraan dan bahasa. Namun, hasil observasi awal di RA Al Munawarah menunjukkan bahwa kemampuan mengenal huruf anak kelompok B masih berada pada kategori mulai berkembang, dengan ditemukannya kesulitan anak dalam membedakan huruf-huruf yang memiliki kemiripan bentuk dan bunyi. Kondisi ini dipengaruhi oleh metode pembelajaran yang masih bersifat konvensional dan belum memanfaatkan media pembelajaran yang inovatif dan sesuai dengan karakteristik anak usia dini. Oleh karena itu, penelitian ini bertujuan untuk mengetahui apakah penerapan media pembelajaran multimedia interaktif dapat meningkatkan kemampuan mengenal huruf pada anak kelompok B di RA Al Munawarah. Multimedia interaktif dipilih karena mengintegrasikan unsur teks, gambar, suara, animasi, dan interaksi yang dapat menciptakan suasana belajar yang menarik, menyenangkan, serta bermakna bagi anak. Diharapkan melalui penerapan media ini, proses pembelajaran menjadi lebih efektif dan mampu meningkatkan kemampuan mengenal huruf anak secara optimal.

Abstract

Early childhood education is a very important stage in developing children's full potential without neglecting their physical and psychological conditions. This research uses a classroom action research method with observation and documentation data collection techniques. However, initial observations at RA Al Munawarah show that the letter recognition skills of children in group B are still in the early stages of development, with children finding it difficult to distinguish between letters that are similar in shape and sound. This condition is influenced by teaching methods that are still conventional

and do not utilize innovative learning media that are appropriate for early childhood characteristics. Therefore, this study aims to determine whether the application of interactive multimedia learning media can improve the ability to recognize letters in group B children at RA Al Munawarah. Based on the research results, there was an increase in the ability to recognize letters in children from the pre-cycle with an average percentage result of 44.10%, then after the action was carried out in cycle I with an average percentage result of 71.96%, after being carried out in cycle II with an average percentage result of 94.46%. Therefore, the application of interactive multimedia learning media can improve children's ability to recognize letters because it integrates elements of text, images, sound, animation, and interaction which can create an interesting, fun, and meaningful learning atmosphere for children

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ISSN 2579-7255 (Print)
ISSN 2524-004X (Online)

INTRODUCTION

Preschool education is a meaningful form of education aimed at developing children's full potential without endangering their physical or psychological condition. This is stated in the Competency Standards Document for Kindergarten and Raudlatul Athfal, which declares: "The goal of Kindergarten and Raudlatul Athfal education is to help students develop psychological and physical potential encompassing moral and religious values, social-emotional development, cognitive skills, physical/motor skills, language, independence, and the arts, in preparation for entering primary education.

Early childhood education (ECE) is a form of education focused on foundational development to support the growth and physical development (fine and gross motor coordination), intelligence (cognitive abilities, creativity, emotional intelligence, and spirituality), and socio-emotional aspects (attitudes, behavior, and religious dimensions), as well as language and communication. This is tailored to the uniqueness and developmental stages experienced by children in early childhood.

One of the most important aspects of early childhood development is the ability to recognize letters. This ability is crucial to a child's development and their readiness for higher levels of education. It must be nurtured and developed in accordance with their needs. Ability

refers to the innate potential or capacity an individual possesses to perform a certain action; however, this ability will develop further with adequate training in order to achieve success.

According to Carol Seefeldt and Barbara A. Wasik (as cited in Trisnawati), letter recognition ability is the ability to perform an action by recognizing the signs or characteristics of letters in written form—members of the alphabet that represent language sounds. According to Papalia (as cited in Sari), symbolic function is the ability to use symbols or mental representations in the form of words, numbers, or images that are assigned meaning by an individual. Recognizing letters from an early age is essential; instruction should occur through socialization processes, and reading teaching methods should be non-burdensome and involve enjoyable learning activities.[1]

According to Dardjowidjojo, letter recognition in early childhood refers to the transition from being unable to identify letters to acquiring information about the visual appearance and sound patterns associated with those letters. This enables children to visually perceive the shape of letters and understand their meaning.[2]

This is particularly important because letter recognition is fundamental knowledge that enables children to comprehend writing and words in their environment. Letter recognition also plays a vital role in supporting language development, particularly in literacy development. Therefore, learning media are necessary to support the learning process..

According to Ahmad Rohani (as cited in Daniyati), media refers to anything that can be perceived and functions as an intermediary/medium/tool for the process of teaching and learning communication. Learning media are tools that can be used to make learning more effective and optimal. Today, the learning process is no longer limited to books and blackboards, as there are many learning media available for teachers to use.[3]

Learning media are tools that can support the teaching and learning process so that the messages conveyed become clearer and the educational or learning objectives can be achieved effectively and efficiently. Learning media play an important role in the learning process. There are several primary functions of learning media, including: serving as effective teaching aids, being an integral part of the learning process, acting as a bridge between learning materials and learning objectives rather than merely supplementary tools, accelerating

[1] Papalia dalam Sari, *Psikologi Perkembangan Anak* (Bandung: Alfabeta, 2016), hlm. 30.
[2] Dardjowidjojo, *Psikolinguistik: Pengantar Pemahaman Bahasa Manusia* (Jakarta: Yayasan Obor Indonesia, 2003), hlm. 45.
[3] Ahmad Rohani dalam Daniyati, *Media Pembelajaran* (Jakarta: Rineka Cipta, 2010), hlm. 45.

students' understanding of learning material, and enhancing the quality of learning. Through interactive learning multimedia, the implementation of early childhood education becomes more engaging, enjoyable, creative, and innovative.[4]

Based on observations at RA Al Munawarah, instruction was still using conventional methods—introducing letters through worksheets. The school had never used interactive multimedia, and frequently relied on a whiteboard and markers to introduce letters to children. Initial observations revealed that 10 out of 14 children had limited recognition of alphabet letters. Some children also confused letters with similar pronunciations or shapes, including b and d, f and v, m and n, m and w, and p and q. Teachers play a critical role in introducing letters to children and must consider dominant factors that can influence letter recognition, such as the use of learning media specifically designed to introduce letters to children aged 5–6 years. The learning medium used in this study is interactive multimedia.

Interactive multimedia is a combination of several elements—text, graphics, sound, video, and animation—that produces a remarkable presentation. Multimedia also has a high level of interactive communication. For computer users, multimedia can be defined as computer information that can be presented through audio or video, text, graphics, and animation. Therefore, multimedia is a combination of data or media to convey information in a more engaging manner.[5]

According to Daryanto, multimedia is divided into two types: linear multimedia and interactive multimedia. Linear multimedia is a type of multimedia that does not provide user control, so it runs sequentially, such as television and film. Interactive multimedia, on the other hand, provides controls that allow users to determine or select how information is presented according to their preferences.

In general, the benefits of using interactive learning multimedia in instruction include: making the learning process more engaging for students; making learning interactive while potentially reducing teaching time; improving students' understanding of subject matter because they can learn independently, anywhere, and at any time. Based on the foregoing explanation, innovation is needed in the use of more engaging and effective learning media, one of which is through interactive multimedia. Interactive multimedia, which integrates

[4] Upik Elok Endang Rasmani, *Pemanfaatan Multimedia Pembelajaran Interaktif berbasis Website Bagi Guru PAUD*, (Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini, 7(5), 2023) hal. 6075

[5] Setya Dwi Koerniawan, *Sistem Multimedia Definisi, Diagram, Perkembangan Dan Aplikasinya,* 2021, hal 10

elements of text, images, sound, animation, and video while providing children with opportunities to interact directly, can increase learning interest, comprehension, and engagement in the learning process. Therefore, the use of interactive multimedia is considered appropriate and relevant in helping to improve letter recognition ability in early childhood, while simultaneously creating a more creative, enjoyable, and meaningful learning experience.

LITERATURE REVIEWS

This study refers to the type of classroom action research because the research aims to improve children's letter recognition ability in Group A through the application of audiovisual learning media. Classroom Action Research (CAR) is a research method conducted by teachers in their own classrooms with the primary goal of improving, strengthening, and refining the ongoing learning practices. According to Daryanto, Classroom Action Research (CAR) does not focus solely on learning outcomes but also on the learning process that takes place in the classroom. The teacher, as the researcher, plays an active role in identifying problems, designing actions, implementing them, and evaluating the results for improvement in subsequent cycles.

Thus, CAR does not merely aim to determine the effectiveness of an action, but also to understand how that action is implemented, how students respond, and what changes occur during the learning process.

METHOD

This study employs a classroom action research (CAR) design. The CAR model by Stephen Kemmis and Robyn McTaggart, frequently referenced in books and articles, consists of four stages: planning, implementation, observation, and reflection. This study aims to improve children's letter recognition ability through the application of interactive multimedia learning media.

This study was conducted at RA Al Munawarah. The research subjects were 14 children in Group B aged 5–6 years. The object of the study was the application of audiovisual learning media to improve children's letter recognition ability.

This study was conducted in two cycles, with the following stages:

1. Cycle I
   a. Research Action Planning Stage
      1) Identifying the obstacles children face in improving their letter recognition ability.
      2) Creating and developing Daily Learning Activity Plans (RPPH) to improve children's letter recognition ability through audiovisual learning media.
      3) Preparing audiovisual media appropriate to children's letter recognition ability.
      4) Preparing observation sheets.
   b. Cycle Implementation Stage

      After planning was complete, the next stage was implementation. In this stage, the researcher acted as the teacher, while the classroom teacher served as the collaborator, observing letter recognition activities. This activity involved the application of audiovisual learning media to improve children's letter recognition ability.
   c. Observation Stage

      In this stage, the author observed the learning process and the children's responses to the audiovisual media. This observation aimed to verify the teacher's observation results based on the following indicators: children were able to name the sounds of letters a–z as displayed; children were able to distinguish between letters with similar sounds (b–d–g, m–n, e–f, p–v); children were able to identify the line elements forming the letters b, d, m, n, p, and q; children were able to write letter symbols; and children were able to recognize the initial letter sound of objects shown in the video.
   d. Reflection Stage

      Based on the observation results, the researcher conducted a reflection to identify the shortcomings and obstacles in implementing the audiovisual media that arose during the learning process. The data obtained were then used to evaluate and plan actions for Cycle II, with the expectation that learning in Cycle II would yield better results.

2. Cycle II

a. Planning in Cycle II was a refinement based on the identification of problems in Cycle I. The activities in Cycle II were:

1) Research Action Planning Stage
2) Identifying the obstacles children faced in improving their letter recognition ability.
3) Creating and developing Daily Learning Activity Plans (RPPH) to improve children's letter recognition ability through audiovisual learning media.
4) Preparing audiovisual learning media appropriate to children's letter recognition ability.
5) Preparing observation sheets.

b. Implementation Stage

1) The teacher greets the children cheerfully.
2) The teacher asks about letters the children already know and connects them to the children's experiences.
3) Children watch an educational video about the alphabet.
4) The teacher points to a letter on the screen; children name it.
5) The teacher provides praise or encouragement when a child correctly identifies a letter.
6) Children are given the task of naming and pointing to the letters shown.

c. Observation Stage

In this stage, the author observed the learning process and the children's responses to the audiovisual media. This observation aimed to determine whether audiovisual media could improve children's letter recognition ability. Subsequently, the researcher gathered data on the children's progress after the improvements were made and also evaluated whether there were improvements in learning outcomes following the refinements in learning activities.

d. Reflection Stage

Based on the research observation results, the teacher was able to conduct self-reflection by examining teacher and student observation data during the learning process. The observation results were collected and analyzed to determine whether the activities conducted could improve children's letter recognition ability.

Data collection techniques used were:

1. Observation

Observation is a method involving careful observation and systematic recording. This technique was used to collect data by observing ongoing activities. Through observation, the researcher could directly observe the development of children's letter recognition ability during the application of audiovisual learning media. Observation examined indicators of children's letter recognition ability.

2. Documentation

Suharsimi Arikunto states that documentation is a data collection technique whose sources include agendas, notes, library/book records, and recordings of everything related to the research problem. The researcher conducted documentation to record learning activities involving the use of audiovisual learning media and the development of children's literacy skills during the study. This included photos, videos, RPPH (lesson planning worksheets), and other documentation that could illustrate children's development.

The instrument used was a letter recognition observation sheet developed based on child development indicators as stipulated in Indonesian Minister of Education and Culture Regulation No. 137 of 2014 on National Standards for Early Childhood Education. Data were analyzed using quantitative descriptive analysis. Children's ability scores were calculated as percentages and then averaged. The categories for assessing children's ability are:

Score Obtained	Letter Grade	Qualification
0%–25%	BB	Not Yet Developing
25%–50%	MB	Beginning to Develop
50%–75%	BSH	Developing as Expected
75%–100%	BSB	Developing Very Well

The average score was calculated using the formula:

$$\mathbf{M = \Sigma x / N}$$

Where:

M = Average score

Σx = Sum of all children's scores

N = Total number of children

The study was declared successful if at least 71% of children achieved the Developing as Expected (BSH) category. According to Geoffrey E. Mills, mutually agreed-upon results among collaborators can be used as the reference criterion for the success of an action. The agreed-upon result of 71% can be used as the basis for determining success. This result was determined based on the research instrument in Cycle I. If the research target was not achieved, the next cycle was conducted to improve children's letter recognition ability through interactive multimedia learning media, until the research target was reached.

RESULT AND DISCUSSION

This study was conducted in Group B at RA Al Munawarah, originating from the issue that the letter recognition ability of children in Group B had not yet developed as expected. Letter recognition ability in Group B at RA Al Munawarah was improved through the use of interactive multimedia learning media, encompassing several aspects: (1) recognizing the sounds and shapes of letters; (2) the ability to distinguish between letters with similar sounds; (3) the ability to recognize the initial letter sound of objects; (4) understanding the line elements that form letters; (5) children's ability to recognize letters through their own names; and (6) the ability to understand words through stories.

In the pre-cycle phase, regarding the letter recognition ability of Group B children at RA Al Munawarah, it was found that all students were still in the "beginning to develop" (MB) category. Of the 14 children observed, none had reached the "developing as expected" (BSH) or "developing very well" (BSB) category. This indicated that children's ability to recognize and comprehend letters was still relatively low and required improvement.

In Cycle I, the average percentage of letter recognition ability was 71.96%, which fell into the Developing as Expected (BSH) category. Two children's letter recognition ability was in the Beginning to Develop (MB) category. Eight children's letter recognition ability was in the Developing as Expected (BSH) category. Meanwhile, four children's letter recognition ability had reached the Developing Very Well (BSB) category.

Action success per child reached 71.96%, while action success per class reached 85.71%, since the success standard encompassed both BSH and BSB. In Cycle I, 12 out of 14 children reached the Developing as Expected (BSH) and Developing Very Well (BSB) categories—a number that had met the action success standard. However, the researcher

decided to proceed to Cycle II, with the expectation that children already in the BSH category would continue to progress to the BSB category.

After the second cycle, the average percentage of letter recognition ability was 94.46%, which fell into the Developing Very Well (BSB) category. Children named Yumna and Aina achieved a maximum score of 40 (100%), demonstrating full mastery of all letter recognition ability indicators. Meanwhile, most of the other children obtained percentages ranging from 87.5% to 97.5%, indicating very strong and evenly distributed letter recognition ability across all students. It can thus be concluded that the application of interactive multimedia learning media successfully improved children's letter recognition ability to an optimal level in the second cycle.

The research results show that interactive multimedia learning media has a positive influence on improving letter recognition ability in early childhood. Several activities were used to measure children's letter recognition ability through interactive multimedia learning media: children were able to name the sounds of letters a–z as displayed; children were able to name the vowels shown; children were able to name the consonants shown; children were able to distinguish between the sounds of two different letters; and children were able to name the letters in their own names. Through the series of activities conducted to improve letter recognition ability, the use of interactive multimedia learning media was able to provide comprehensive stimulation for children in recognizing letters. Learning became more engaging, meaningful, and structured, enabling children's letter recognition ability to develop optimally and progressively in accordance with established indicators. This improvement can be understood through the following theories. According to Seefeldt and Wasik, letter recognition is children's ability to recognize the signs or characteristics of letters in the form of letter symbols that represent language sounds. This indicates that letter recognition in early childhood is not limited to recognizing the visual form of letters, but also encompasses the understanding that each letter has a specific sound that forms the basis of the reading process. One important aspect of early childhood development is letter recognition ability. It is crucial because letter recognition is foundational knowledge that enables children to comprehend writing and words in their environment. Letter recognition also plays an important role in supporting language development, particularly in the literacy development aspect.[6]

[6] Herman Ainun Andi Annisa and Rusmayadi, *Pengaruh Media Pembelajaran Pengenalan Huruf Berbasis Augmented Reality Terhadap Kemampuan Keaksaraan Anak Usia 5-6 Tahun Di TK Naura Nashyefa*, 2025, Vol 12, No 01 (n.d.): 01–07.

The difficulties experienced by children in the early stages of pronouncing certain letter sounds, especially letters with similar sounds such as b and d, or p and v, are consistent with the views of Snow, Burns, and Griffin: the ability to distinguish and pronounce letter sounds is part of phonological awareness that is still developing during childhood, so errors in pronouncing letter sounds are normal at the early stages of learning to read. Furthermore, Montessori's view states that children will find it easier to recognize and remember letters if learning engages more than one sense. By simultaneously seeing letters and hearing their sounds, children can build a stronger understanding of the relationship between the shape of a letter and its sound, including in recognizing consonants.

Interactive multimedia learning media designed to be engaging, colorful, and animated helps children focus, stay motivated, and prevents boredom. This is consistent with Piaget's theory that early childhood is in the preoperational stage, where learning is most effective when presented concretely and visually. By progressively presenting letters—from simple lines to complete letter forms—children can more easily assimilate and accommodate the concept of letter shapes. The practice techniques used in this study gave children opportunities for continuous repetition. According to Munir (as cited in Fitriya), interactive multimedia is multimedia created with a display that fulfills the function of conveying information or messages and provides interactivity for its users.[7] Thus, if users have freedom in controlling the course of the multimedia, it is called interactive multimedia. Roestiyah argues that the drill method is a learning technique that emphasizes continuous practice so that children develop advanced skills in the material being studied.

It can therefore be concluded that the use of interactive multimedia learning media combined with drill techniques has proven effective in improving letter recognition ability in early childhood—visually, auditorily, and linguistically. This media not only helps children understand letters cognitively but also supports language development, concentration, memory, motor coordination, and reading readiness in later years.

CONCLUSION

Based on the research results, there was an improvement in children's letter recognition ability from the pre-cycle stage with an average percentage of 44.10%, then after the action was carried out in Cycle I with an average percentage of 71.96%, and after Cycle II with an

average percentage of 94.46%. Thus, the improvement from the pre-cycle to Cycle II was 44.10% to 94.46%.

REFERENCES

Agung, F. P., & Prihantoro, H. (n.d.). *Melakukan Penelitian Tindakan Kelas*. Jurnal Ilmu-Ilmu Keislaman, 9(1), 50–60.

Ahmad, T. A. N., Aisyah, A., & Riza, O. (2022). Meningkatkan kemampuan mengenal huruf dengan media kartu huruf pada kelompok B di PAUD Islam Ceria Hidayatullah Lhoknga Aceh Besar. *Jurnal Ilmiah Mahasiswa*, 3(2), 1–19.

Arikunto, S. (2010). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.

Arikunto, S. (2017). *Penelitian Tindakan Kelas*. Jakarta: Bumi Aksara.

Brewer, J. A. (2007). *Introduction to Early Childhood Education: Preschool Through Primary Grades*. Boston: Pearson Education.

Bruner, J. S. (1960). *The Process of Education*. Cambridge: Harvard University Press.

Daniyati. (2010). *Media Pembelajaran*. Jakarta: Rineka Cipta.

Dardjowidjojo, S. (2003). *Psikolinguistik: Pengantar Pemahaman Bahasa Manusia*. Jakarta: Yayasan Obor Indonesia.

Daulae. (2015). *Media Pembelajaran*. Jakarta: Rineka Cipta.

Daryanto. (2016). *Media Pembelajaran*. Yogyakarta: Gava Media.

Dhieni, N., dkk. (2014). *Metode Pengembangan Bahasa*. Tangerang Selatan: Universitas Terbuka.

Fahyuni, E. F., & Nurdyansyah. (2016). *Inovasi Model Pembelajaran*. Sidoarjo: Nizamia Learning Center.

Fitriya, A. P., dkk. (2024). Pemanfaatan multimedia interaktif sebagai inovasi media pembelajaran berbasis teknologi pada pembelajaran pendidikan Pancasila kelas IV sekolah dasar. *NUSRA: Jurnal Penelitian dan Ilmu Pendidikan*, 1514–1520.

Hamka. (2018). *Media Pembelajaran*. Jakarta: Rineka Cipta.

Hidayat, F., & Prihantoro, A. (n.d.). *Melakukan Penelitian Tindakan Kelas*. Jurnal Ilmu-Ilmu Keislaman.

Khadijah. (2012). *Konsep Dasar Pendidikan Prasekolah*. Bandung: Citapustaka Media Perintis.

Koerniawan, S. D. (2021). *Sistem Multimedia: Definisi, Diagram, Perkembangan, dan Aplikasinya*. Jakarta: Andi Offset.

Kurikulum 2004. (2004). *Standar Kompetensi Taman Kanak-Kanak dan Raudlatul Athfal*. Jakarta: Departemen Pendidikan Nasional.

Mills, G. E. (2000). *Action Research: A Guide for the Teacher Researcher*. New Jersey: Prentice Hall.

Montessori, M. (2013). *Metode Montessori*. Yogyakarta: Pustaka Pelajar.

Munir. (2015). *Multimedia: Konsep dan Aplikasi dalam Pendidikan*. Bandung: Alfabeta.

Papalia, D. E. (2016). *Psikologi Perkembangan Anak*. Bandung: Alfabeta.

Pane, S. W., & Parende, S. U. (2020). Peningkatan hasil belajar siswa menggunakan model problem based instruction (PBI). *Jurnal Pendidikan*, 1, 23–35.

Piaget, J. (1964). Development and learning. *Journal of Research in Science Teaching*, 2(3).

Rasmani, U. E. E. (2023). Pemanfaatan multimedia pembelajaran interaktif berbasis website bagi guru PAUD. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(5), 6075–6084.

Risnita. (n.d.). Asesmen kemampuan mengenal huruf anak usia dini. *Jurnal Pendidikan Islam*, 5(2), 240–244.

Roestiyah, N. K. (2008). *Strategi Belajar Mengajar*. Jakarta: Rineka Cipta.

Salwanur, dkk. (2019). *Pengenalan Huruf pada Anak Usia Dini*. Jakarta: Prenada Media.

Seefelt, C., & Wasik, B. A. (2008). *Pendidikan Anak Usia Dini: Menyiapkan Anak Usia Tiga, Empat, dan Lima Tahun Masuk Sekolah* (Alih bahasa Trisnawati). Jakarta: Indeks.

Seefelt, C., & Wasik, B. A. (2012). *The Early Childhood Curriculum: Current Findings in Theory and Practice*. Jakarta: Prenada Media.

Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing Reading Difficulties in Young Children*. Washington, DC: National Academy Press.

Sujiono, Y. N. (2013). *Konsep Dasar Pendidikan Anak Usia Dini*. Jakarta: PT Indeks.

Surjono, H. D. (2017). *Multimedia Pembelajaran Interaktif: Konsep dan Pengembangan*. Yogyakarta: UNY Press.

Tarigan, H. G. (2008). *Menyimak sebagai Suatu Keterampilan Berbahasa*. Bandung: Angkasa.

Wibawa, R. K., & Husnul, K. (n.d.). Efektivitas model pembelajaran CIRC terhadap hasil belajar. *Jurnal Teknologi Pendidikan*, 2(2), 76–87.

Zulfianah, A. (n.d.). *Jenis-Jenis Media dalam Pembelajaran*.