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Multimedia as a Learning Tool in Training Reading Skills of Elementary Schools Students

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ABSTRAK

Pemahaman membaca adalah aktivitas ganda yang membutuhkan berbagai proses kognitif dan linguistik untuk menyelesaikannya. Ini adalah hasil dari dua set keterampilan yaitu: decoding dan pemahaman linguistik. Ini mencakup perbedaan pemahaman membaca dan memberikan dasar yang berguna untuk mengklasifikasikan kesulitan membaca. Penelitian ini bertujuan untuk mengembangkan multimedia sebagai perangkat pembelajaran dalam melatih keterampilan membaca siswa jenjang sekolah dasar (SD). Subyek penelitian ini melibatkan 30 siswa kelas 5 pada tingkat sekolah dasar. Penelitian ini menggunakan pendekatan penelitian research and development (R&D), melalui studi pengembangan Gall & Borg. Teknik pengumpulan data dilakukan melalui wawancara dan observasi untuk basis data non tes dan evaluasi formatif dan sumatif untuk pengujian keefektifan media yang dikembangkan yang termasuk ke dalam kategori tes. Teknik analisis data yang digunakan dalam penelitian ini menggunakan beberapa tahapan yang meliputi; data transkripsi, verifikasi, dan pengkodean dari seluruh data baik tes dan non-tes yang telah dihimpun. Model pembelajaran diintegrasikan dengan berbagai perangkat pembelajaran (multimedia) meliputi buku siswa dan buku guru, serta rencana pelaksanaan pembelajaran (RPP). Berdasarkan data yang diperoleh, diketahui bahwa multimedia yang terintegrasi dengan model pembelajaran inkuiri efektif dalam meningkatkan hasil belajar siswa daripada tanpa menggunakan multimedia. Temuan studi ini menunjukkan sebuah acuan mendasar terkait untuk berpikir tentang pemahaman membaca dan pertumbuhannya dengan menekankan pada pentingnya decoding dalam belajar membaca.

ABSTRACT

Reading comprehension is a dual activity that requires various cognitive and linguistic processes to complete. This is the result of two skill sets namely: decoding and linguistic comprehension. It covers the differences in reading comprehension and provides a useful basis for classifying reading difficulties. This study aims to develop multimedia as a learning tool in training the reading skills of elementary school students. The subjects of this study involved 30 grade 5 students at the elementary school level. This research uses a research and development (R&D) approach, through a Gall & Borg development study. Data collection techniques were carried out through interviews and observations for non-test databases and formative and summative evaluations for testing the effectiveness of the developed media which were included in the test category. The data analysis technique used in this study uses several stages which include; transcription, verification, and coding data from all test and non-test data that have been collected. The learning model is integrated with various learning tools (multimedia) including student and teacher books, as well as lesson plans (RPP). Based on the data obtained, it is known that multimedia integrated with the inquiry learning model is effective in improving student learning outcomes than without using multimedia. The findings of this study provide a fundamental reference for thinking about reading comprehension and its growth by emphasizing the importance of decoding in reading.

1. INTRODUCTION

The prevalence of learning media or tools among the younger generation has also piqued the interest of educational researchers, particularly in the post-coronavirus disease 2019 (COVID-19) pandemic era, when technology-based media users and digital readers are on the rise, and blended and remote learning is becoming more common (Kuhfeld et al., 2020; Silva et al., 2021). On the one hand, digital reading encourages social connection. While reading practices always entail text circulation among readers the social element of reading is emphasised in the digital environment, i.e., the creation and consumption of a variety of textual forms are made more convenient via technology based media. Interactive communication platforms, such as e-mail applications and social networking sites (SNSs), on the other hand, are replete with digital texts; for example, test items in the PISA computer-based reading assessment were designed to include social media platforms such as blogs,

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forums, and online news (Fırat & Koyuncu, 2021; Schleicher, 2018). Understanding the role of multimedia-based technology in improving or hindering students' digital reading performance could help educators help adolescents properly regard and use social media, identify pedagogical and administrative implications for technology-assisted learning and promote equity in reading education (Citrawati et al., 2021; Costa et al., 2019). While researchers have thoroughly investigated the effects of social media factors on students' general academic achievement, only a few studies have revealed the effects of social media on students' digital reading performance, particularly in the PISA research context (Feng et al., 2019; Junco, 2012; Kirschner & Karpinski, 2010; Muls et al., 2020). Furthermore, most of these PISA-related studies were limited in some way because the factors investigated were limited to people's general use of social media, no consistent conclusion was reached, and the PISA 2009 database used in these studies only collected computer-based reading data from 19 countries/regions. Reading is an important basic skill that is taught to students from elementary school, starting at the elementary school level, even since kindergarten. On this basis, it is necessary to gradually train students in reading skills. This is important because there are differences in the reading abilities from low, middle to high ones. In this regard, the basic skills in the form of reading are obtained by students through various trainings and learnings periodically and gradually to achieve goals stated in the learning process (Manoli & Papadopoulou, 2012; Suggate & Reese, 2012). There are three issues that cause pupils to have poor reading skills. The first is that reading materials provided by teachers, such as textbooks, periodicals, or e-books, are tedious due to their lengthy language. Many teachers are unaware of what their kids require in terms of reading. Students' reading pleasure and motivation should be cultivated through the provision of engaging reading content. They can begin their reading journey by reading an English comic online (Bishop et al., 2016; Mindog, 2016). Students can be more engaged in reading and further reading if they are given reading materials such as the comic, which contains many illustrations and stories. The second issue is that many pupils are unaware of reading materials that are appropriate for them and can inspire them to like reading. Students do not know what reading material they should read, which leads to a lack of reading habit (Hjetland et al., 2019). Teachers and parents can assist pupils in locating reading materials that are appropriate for them. If students discover reading material that they enjoy, their reading pleasure will naturally rise, as will their reading habit. The second issue is kids' motivation to read. Students today may lose interest in reading as a result of the reading material itself (Adlof & Hoggan, 2018). Students will become demotivated in their English study if they are not interested in the reading material. As a result, the reading material chosen has an impact on pupils' motivation and ability to read.

Relevant research showed that reading skills in children (elementary school students) increased significantly after receiving training, intervention, supervision and evaluation. The results in question are in the form of an average reading skill after the intervention of 2.72, whereas previously it was only 2.54 (Vongkrahchang & Chinwonno, 2016). This shows the important role of training for the reading skills of elementary school students. Reading skills are not something that a person (individual) is born with, this type of basic skill must be trained from an early age (and elementary age) to children (Nurhadi, 2008; Sulistyawati & Sujarwo, 2016). Likewise, educators need to pay attention to students in reasoning each lesson, including reading. The goal is to make effective methods, techniques, strategies, and approaches applied to train students' reading skills. Thus, students are expected to be able to master how to read quickly (Adlof & Hoggan, 2018; Bishop et al., 2016). In reading skills, the term effective reading is known quickly (Inawati & Sanjaya, 2018; Kamalasari, 2012). This skill is a form of advanced skill that is applied to students. On this basis, it is understood that students will be able to master speed-reading techniques effectively, when they are already proficient in basic level reading. In other words, the success of students who are proficient in reading is largely determined by the basic reading skills they have previously learned (Language and Reading Research Consortium, 2015). The phenomenon shows that students who are slow to read will find it difficult to follow the learning activities given by the teacher, they will often be left behind with students who are easy to read (Ferrer et al., 2015; Foorman et al., 2018; Hjetland et al., 2019; Joyce & Weil, 2003). Therefore, efforts are needed to improve students' reading skills, with the aim of making it easier for students to follow the learning process to the fullest. Thus, reading skills are also very influential on student achievement or learning outcomes. The learning model applied by the teacher (educator) in the classroom has a major influence on the creation of a conducive learning climate for students, especially elementary school students (Fitria, 2010; Nurani et al., 2021). One of the effective learning models that can be applied by educators to students is multimedia-based learning (Afrianti & Marlina, 2021; Wainwright, 2007). Through this model, students are invited to think critically, be active, and enjoy participating in the learning and training process, starting from observation, data collection, data process, activities, and collaboration on verval and non-verbal components. Furthermore, multimedia simply means 'many media' This means that learning is carried out through various learning media, namely text, graphics, interactive video links, audio, video, pictures, and educational animations. The various forms of media are designed to be used integrally (one work unit), in order to produce communicative information between educators and students during the learning process (Castles et al., 2018; Catts, 2018; Hua & Keenan, 2017; Hulme & Snowling, 2015). In connection with the description above, it is understood that learning carried out by educators inside and outside

the classroom, should go through careful planning stages, especially from the aspect of basic reading skills. This is intended so that students are able to obtain appropriate materials and training for their reading skills from an elementary age. Therefore, researchers seek to conduct research on the type of development to train students' basic reading skills, which are summarized in the title, "Multimedia as a Learning Tool in Training Reading Skills of Elementary School Students". The notion of general guidelines utilized in multimedia-based learning is mostly at the secondary school level, with classes focusing on practice as the intended learning outcomes. It includes analysis, design, development, implementation, and assessment as five steps of instructional concepts to consider while using multimedia as a learning aid to increase reading proficiency. Based on the literature and our personal experience, we propose additional considerations for developing the teaching-learning process, particularly in the language acquisition of reading skill through multimedia: impact on learning of existing instructional ideas in some way. This paper contributes significantly by providing a comprehensive set of guidelines or principles for developing a lesson that incorporates media for language mastery in the specific competency of reading. The purpose presented in this study is to develop multimedia as a learning tool in training the reading skills of elementary school (Primary School) students, based on the study's background.

2. METHOD

It is a research and development (R&D) aiming to develop effective and practical products as learning media. In this context, the learning media in question is multimedia as a learning tool in training the reading skills of elementary school students. The participants in this study were all 5th grade students of elementary school who had attended a language lesson in the Rahuning district, Asahan regency, North Sumatera, Indonesia. A total of 100 students were included in the study, with a sample size of 30. The pupils that took part in the survey were between the ages of 10 and 11. The sample was taken from schools that had incorporated multimedia in their educational processes, and it was taken using a basic random sampling procedure. This method employed a lottery, similar to that used in rotating savings, in which the researcher selected samples at random to meet the total number of samples required. It was done from July 2020 to April 2021 at SD Adhyaksa Medan. Several steps were taken by the researcher during the data collection process. The initial phase involved contacting participants who met the established criteria. The researcher then chose a location and time for the interview. The final phase concerned the researcher's language during the data collection process. The participants were approached over WhatsApp by the researcher, who inquired about their desire to participate in the study. Following the recruitment of participants, the researcher conducted the interview on the agreed-upon day. The interview was performed by the researcher in one of the participants' homes. The researcher conducted the interview entirely in Indonesian. The use of the Indonesian language as a means of communication throughout the interview made the questions more intelligible to the participants and made it simpler for the researcher to obtain information from them. The researcher chose the Indonesian language since all of the participants are Indonesian and Indonesian is their primary language in everyday life. As a result, the participants found it easier to respond to the researcher's questions when they used Indonesian. In addition, the researcher taped the interview procedure to ensure that no information from the participants was lost. For each participant, the interview took about 10-20 minutes to complete. All of the participants have thoroughly explained all of the material pertaining to this study. As a result, this was an ideal opportunity to conduct the interview for this study.

The researcher analyzed the data after completing all phases in the data collection process. The researcher went through numerous steps in the data analysis procedure. These included data transcription, member verification, and coding. During the interviewing procedure, the researcher gathered certain research-related information from the participants. The researcher transcribed the data, which was still in the form of a tape, into written text without making any alterations. An evaluation, both formative and summative, is carried out to determine the success of adopting the learning model. The developer uses one-on-one assessment, small group evaluation, and field trial evaluation methodologies to carry out formative evaluation on the process of designing the model in order to assist growing its efficacy (Gall et al., 2003). Moreover, in order to find out its effectiveness, a summative evaluation was applied at the last stage on learning design product, which is done by parties other than learning developer in this situation. As a result, a large scale test was implemented at the experiment class. To determine of its usefulness, statistical tests utilizing the t-test were used to assess its performance. In this study, questionnaires and tests were employed as instruments. In collecting the data, it approaches employed a non text instrument as the technique, which were in line with the instrument. To collect data on learning model effectiveness, the test technique was used to figure out reading speed measurements from pupils. The researcher used the following steps to compile the research instrument: identifying the variables in the title formulation, describing these variables into sub-variables, searching for indicators in the sub-variables, listing descriptors for each indicator, formulating each descriptor into instrument items, and finishing the instrument with filling instructions and a preface (Riduwan, 2003). This research employs an instrument created by merging the instructional process with multimedia as a learning tool (Bach et al., 2007; Kats, 2010). The three

main elements of learning are learning planning, learning implementation, and learning evaluation. Submission of a learning plan, explanation of a learning plan, and preparation and submission of learning contracts are all examples of learning planning. Recording attendance, synchronous and asynchronous presentation of subject, assignments, and delivery of instructional materials and learning tools are all examples of learning implementation. Conducting and submitting exams, tests, or assignments are part of the learning evaluation. This research tool employs a five-category Likert scale (Strongly Agree, Agree, Doubt, Disagree, Strongly Disagree). To acquire the viability data, the non-test technique was applied to know its produced learning design (Assingkily, 2021; Elleman, 2017; Elwér et al., 2013; Lervag et al., 2018). The non-test technique is in the form of a validation sheet by the terms of product and research intruments ones. Following the collection of the necessary data and information, data analysis is performed to determine model product feasibility. After assigning a score to the evaluation sheet, the average score is calculated, and the standard category is selected by comparing it to the eligibility criteria. T-test statistical analysis was performed to assess hypotheses about the effectiveness in inquiry learning approach. Faculty members from Asahan University's colleges of educational sciences assessed the questionnaire's validity. They are experts in general curricula, educational technologies, and evaluation and assessment, so they may comment on the language's clarity and technical composition. Their opinions were taken into account. Five items were removed, three were added, and several others were changed. Following the change, the final version of the questionnaire was presented to the committee of juries, who confirmed that it was suitable for the study's aims. To ensure the questionnaire's reliability, the test-retest approach was utilized, which involved administering the scale to a group of five faculty members who were not part of the study population and then administering it again two weeks later. As a result, the Pearson coefficient was calculated between their estimates at both times, and it was shown to be significant (.78). Then, for the purposes of this study, this value is appropriate.

3. RESULT AND DISCUSSION

Result

Learning Models Development

The lecture approach, in which providing the information by the teachers straight forward through question-answer and or discussion in the class within the instructional process. The students have not been utilized to its full potential during the learning process. They have not actively participated in the application of learning, when communication is one-way, and when the teacher provides learning material in class, students appear inert as listeners. Other data suggest that while teaching, teachers tend to apply conventional strategies in teaching their students by not considering students' needs in line with the topic presented (Chui, 2018; Dawson et al., 2018; Soedarso, 2010). Proper form of teachers-students interactions were not well-established in the class that might help pupils enhance their speed reading abilities and develop their learning activities.. Characteristics of primary school fifth-grade kids aged eleven to twelve years old become the basis in showing their personal variances in a variety of elements and fields, including intelligence, cognition, linguistic, personality, and physical development. Academic results for kids labeled as not obtaining maximum achievements were analyzed. This is supported by the findings of the calculation of students' final semester examination score on the sucject of Indonesian language gained the 64.60 for the grade entering the study in 2019/2020 academic year. The achieved score was lower than the minimum standard applied that was 85.00. This data is backed up by teacher interviews, which show that students' academic performance were mostly not reaching the minimum passing grade stated.

Development of Assessment Instrument

A reading ability test instrument was created to examine the speed of students' reading skill as the learning goal. The test, which was written in the style of a story, is 263 words long. They were given particular time allotment for the activities of reading in order to find out its speed in the measurement of words read or counted in minutes (kpm).

Learning Strategies Development

It refers to the preceding stages in the production of inquiry learning models, namely, focusing on purpose, non-physical features, and situation. Learning approaches include (1) instructor overview and (2) pupils' behaviors during the learning process. For the design of inquiry models learning, the implementation plan contains the structutre of instructional strategy for the transfer knowledge scenario.

Learning Materials Development

It is in the form of book for students covering sxi chapters namely; (1) ecosystem, (2) ecosystems' changing, (3) creatures' chain, (4) food network, (5) ecosystems' power, and (d) environmental changing, contains the topics for Indonesian subject lesson at the 5th grade in primary level.

Formative Evaluation Development

It is used to gather data which can be applied to improve the inquiry learning design resulted in the quality of its model. The following are the process that were included: (1) formative evaluation instrument compilation, and (2) formative evaluation implementation, which include: (a) evaluation by expert, such as; material, desing, and language validation, (b) peers'evaluations, in certain number of participants as the research subject in ways of small scale and large scale product trial (Evesque et al., 2019; Lonigan et al., 2018; Trianto, 2007).

Instructional Revision

A refinement to the inquiry learning model was developed referring to the findings of inputs by experts taken from the formative evalution results for the revision. It also included the comments or suggestions from the students used as the supporting references for its design, model, and product completion.

Summative Evaluation Development

The goal of summative evaluation is to determine its superiority compared to the related materials available. Summative evaluation requires an independent assessor rather than a learning design designer (Supriyono & Sugirin, 2014). This is one of the reasons why summative evaluation isn't part of the learning system development process. Other statement claiming that it is apart from the further possible step (Muhyidin, 2017).

Books Model Eligibility

It provides validation from across experts to evaluate its quality on the model books by inquiry learning. The results are presented in Table 1.

Table 1. Model Book Validation Results (First Stage**)**

No	Expert	Scores
1	Design	3.80
2	Material	3.94
3	Language	4.02
	Average	**3.92**

It can be stated that from Table 1, the overall validation scores gained from the experts received average score of 3.92, putting it in the proper category.

Feasibility of the Learning Implementation

The experts coming from three fields namely; material, design, and language who validate the viability of the created inquiry model's learning implementation plan. Table 2 summarizes the result of learning by applying the model taken from the step 1 after being revised to see its feasibility within the assessment aspects of experts.

Table 2. Lesson Plan Assessed by Experts Results (The first stage)

No	Expert	Scores
1	Design	3.88
2	Material	3.92
3	Languages	4.04
	Average	**3.95**

Table 2 shows that the expert's on the feasibility evaluation results of instructional process in the first step received gaining average score of 3.95, placing it in the proper category. Improvements to model of inquiry learning were set based on the outcomes of contemplation and observation of expert ideas. The third model prototype was created as a result of the improvements made. Furthermore, the third prototype was put to the test by the specialists in the second trial stage.

Based on Vygotsky's argument, it is clear that using the model of inqury learning in the classroom is able to support higher functions mentally, with the goal of improving students' speed reading abilities. Because inquiry learning allows students to understand the concepts and principles of interactions between teachers, students, and surrounding environment during the teaching-learning activities inside and or outside the classrooms. Due to a shared understanding of the social structure among students and teachers, spontaneous social engagement will emerge. particularly, the research and development ended to the model of inquiry learning which was created

using research methodology research and development concepts. All the included experts have validated the inquiry learning model developed. Both small anda large scale trials are done after the results of validation reveal the practicality of the product created. The effectiveness and practicality were then put to the test. As a result, an inquiry-based learning approach has emerged.

Discussion

There are some relevant researches regarding to the use of media as means of reading skill acquisition for the students to be part of language learning. It shows similar results where media and or any learning tool can be utilized to reach the learning goals especially in reading. Indeed, some researchers have recommended employing musical training to improve reading skills and language skills in general (Cogo-Moreira et al., 2013; Tierney & Kraus, 2013), with the expectation that musical training could provide a cost-effective educational method that could benefit all students. Musical training in eight-year-old children was connected to increased auditory non-word segmentation over a two-year period, implying that musical activities can influence more complex language skills. Children were divided pseudo-randomly into either music or painting training in this study, and their capacity to learn and recognize novel non-words was examined one and two years after the random group evaluation (François et al., 2013). The music group outperformed the painting group on the test, as evidenced by increased behavioural performance and enhanced electrophysiological responses to familiar vs unfamiliar non-words. Although music training has been shown to improve reading and other language processing or performance assessments, the results may be similar to those of other treatments (Bhide et al., 2013). Language training programs, at least in some situations, may provide similar benefits to music training (Tervaniemi et al., 1997). Furthermore, the results of musical activities for improving reading have not always been positive, especially when music instruction is delivered as a group activity in a school setting (Cogo-Moreira et al., 2013). Despite the fact that methodology, participants, and outcome measures vary widely between research, a recent meta-analysis reveals that music training appears to promote both phonological awareness and the development of reading skills (Eccles et al., 2021). Several studies, however, have questioned whether musical training improves language outcomes or if the benefits of musical training are attributable to other underlying reasons. It also discovered that pre-existing perceptual musical skills have a greater impact on language skills than musical training (Swaminathan & Schellenberg, 2020). Recent studies also suggests that there isn't a one-way relationship between perceptual musical skills and verbal skills. findings, Learning a foreign language can help with cerebral processing of musical information, bolstering theories concerning the connection between music and language functions (Tervaniemi et al., 1997; White et al., 2013). Recent research suggests that many of the benefits attributed to musical instruction may be due to fundamentally effective auditory skills. Adult non-musicians who are proficient in several musical perception tasks, for example, score better in speech in noise discrimination than non-musicians who do badly in musical perception tasks. Many of the advantages attributed to musically trained persons are likely the consequence of both nature and nurture, as some non-musicians can demonstrate similar benefits as musically trained individuals (Swaminathan & Schellenberg, 2020).

Individuals learn to read as a result of their schooling and as a result of practice. The learning of this talent at the appropriate moment has a positive impact on an individual's academic and social lives. Reading is today characterized as a meaning-making process that makes use of past knowledge, is based on successful communication between the writer and the reader, and is carried out in accordance with a proper method and objective in a well-organized environment. Fluency, strategy, motivation, continuity, and meaning construction are all important aspects of effective reading. Individuals who successfully acquire reading skills, which are the foundation for gaining knowledge and learning, are better equipped to develop socially and academically, as well as adapt to their surroundings. Reading difficulty is characterized as a student's reading performance being lower than expected based on their age and learning potential, as well as the student's changeability as a result of cultural, linguistic, and educational experiences. It was underlined that when weak readers couldn't understand the texts, they couldn't apply helpful tactics. They read aimlessly, with little belief that reading would help them, were unable to recognize inconsistencies or apply hints, had poor calculation skills, and frequently failed tests. It is also reported that the time it takes for those with reading issues to improve their grades and reading skills might range from a few months to five to six years. This disparity is due to both reading challenges and student personality variations. It was discovered that the student's most common reading errors were skipping, adding, reading a word fully inaccurately, and mistaking particular sounds with one another. It was determined that these errors were caused by carelessness, sound mixing, and a lack of word recognition. The related literature was scanned with the goal of eliminating these errors, and it was decided to prioritize familiarizing the student with sounds that he did not recognize, that he found difficult to recognize, or that he generally mixed up, as well as conducting syllable and word recognition activities. It's also emphasized that word recognition and differentiation abilities are vital for reading fluency, and that readers with poor word recognition skills can't devote much time to comprehension since they're too busy articulating words. As a result, the student was given

a 38-lesson-hour study plan, with 18 lesson hours dedicated to sound, syllable, and word recognition exercises and the rest of the study devoted to text-reading activities, starting with simple texts that included sounds that the student was unfamiliar with and progressing to more difficult texts.The outcomes of this study show that students' reading skills can be enhanced when appropriate learning tools in terms of media are employed and implemented for resolving reading problems in students with reading challenges. Furthermore, the earlier interventions for pupils with reading challenges are implemented, the more effective they will be. The fact that the subject of the study, has had reading challenges since fourth grade has resulted in the student's loss of self-confidence, estrangement from his peers, and poor academic, psychological, and social consequences. Following interviews with the student's class instructor and discussions with the school counsellor at the conclusion of the study, it was established that he participated in class, was willing to read, and that his academic progress had improved in tandem with his reading ability. In this case, more successful results can be achieved if intervention can be made with students with similar problems in previous grades, if the number of hours for individual study programs conducted with these students can be increased, and if conditions at home can be improved and parental support obtained.

4. CONCLUSION

Following is the conclusion based on the prior discussion: To begin, the model of learning established is an inquiry learning that comprises of social system, syntax, support system, instructional impact, accompaniment, and reaction principle to improve ability of speed reading at primary school pupils. Paradigm book resources, lesson plan, instructor book, and student book are among the items included in the created learning model. Design experts, material specialists, and linguists have all validated the entire collection of inquiry learning models, demonstrating that the learning model products are usable. Second, the established model of inquiry-learning has been shown to be beneficial in improving students' speed-reading ability outcomes, as evidenced by the statistical t-test, which shows that the value of t-count (9.98) is greater than the value of t-table (2.00). Finally, the constructed model of inquiry-learning has a level of practicality at 3.39 with no need for improvement. The researcher revealed several advantages of using multimedia as a learning tool to help pupils enhance their reading skills. Students learned some language skills, such as vocabulary and grammar, by using technology as a learning medium. According to the findings of the study, the usage of multimedia could improve the research participants' reading comprehension skills, creativity, and reading motivation.

5. REFERENCES

Adlof, S. M., & Hoggan, T. P. (2018). Understanding dyslexia in the context of Developmental Language Impairemnt. *Language, Speech, and Hearing Services in Schools*, *49*(5), 762–773. https://doi.org/10.1044/2018_LSHSS-DYSLC-18-0049.

Afrianti, M. N., & Marlina, M. (2021). Peningkatan Kemampuan Membaca Pemahaman Melalui Strategi Probing-Prompting Bagi Anak Berkesulitan Belajar. *Jurnal Basicedu: Journal of Elementary Education*, *5*(1). https://jbasic.org/index.php/basicedu/article/view/653.

Assingkily, M. S. (2021). *Metode Penelitian Pendidikan*. K-Media.

Bach, S., Haynes, P., & Lewis, J. (2007). *Online Learning and Teaching in Higher Education*. Open University Press.

Bhide, A., Power, A., & Goswami, U. (2013). A rhythmic musical intervention for poor readers: a comparison of efficacy with a letter-based intervention. *Mind Brain Educ*, *7*(2), 113–123. https://doi.org/10.1111/mbe.12016.

Bishop, D. V. M., Snowling, M. J., Thompson, P. A., Greenhalgh, T., & Consortium, C. (2016). CATALISE: A multinational and multidisciplinary delphi consensus study. identifying language impairments in children. *PloS One*, *11*(12). https://doi.org/10.1371/journal.pone.0158753.

Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, *19*(1), 5–51. https://doi.org/10.1177/1529100618772271.

Catts, H. W. (2018). The simple view of reading: Advancements and false impressions. *Remedial and Special Education*, *39*(5), 317–323. https://doi.org/10.1177/0741932518767563.

Chui, Y. D. (2018). The simple view of reading across development: The prediction of grade 3 reading comprehension by prekindergarten skills. *Remedial and Special Education*, *395*, 289–303. https://doi.org/10.1177/0741932518762055.

Citrawati, N. K., Suwastini, N. K. A., Jayantini, I. G. S. R., & Dantes, G. R. (2021). Telegram as Social Networking Service (SNS) For Enhancing Students' English: A Systematic Review. *JELTL (Journal of*

English Language Teaching and Linguistics), *6*(2), 239–260.
Cogo-Moreira, H., de Avila, C. R. B., Ploubidis, G. B., & de Jesus Mari, J. (2013). Effectiveness of music education for the improvement of reading skills and academic achievement in young poor readers: a pragmatic cluster-randomized, controlled clinical trial. *PLoS One*, *8*(3). https://doi.org/10.1371/journal.pone.0059984.
Costa, C., Hammond, M., & Younie, S. (2019). Theorising technology in education: an introduction. *Technology, Pedagogy and Education*, *28*(4), 395–399. https://doi.org/10.1080/1475939X.2019.1660089.
Dawson, N., Rastle, K., & Ricketts, J. (2018). Morphological effects in visual word recognition: children, adolescents, and adults. *Journal of Experimental Psychology-Learning Memory and Cognition*, *44*(4), 645–654. https://doi.org/10.1037/xlm0000485.
Eccles, R., van der Linde, J., Le RouX, M., Swanepoel, D. W., MacCutcheon, D., & Ljung, R. (2021). The effect of music education approaches on phonological awareness and early literacy: a systematic review. *Australian Journal of Language Literacy*, *44*(1). https://doi.org/10.1080/03004430.2020.1803852.
Elleman, A. M. (2017). xamining the impact of inference instruction on the literal and inferential comprehension of skilled and less skilled readers: A meta-analytic review. *Journal of Educational Psychology*, *109*(6), 761–781. https://doi.org/10.1037/edu0000180.
Elwér, S., Keenan, J. M., Olson, R. K., Byrne, B., & Samuelsson, S. (2013). Longitudinal stability and predictors of poor oral comprehenders and poor decoders. *Journal of Experimental Child Psychology*, *115*, 497–516. https://doi.org/10.1016/j.jecp.2012.12.001.
Evesque, K. C., Kieffer, M. J., & Deacon, S. H. (2019). Inferring meaning from meaningful parts: The contributions of morphological skills to the development of children's reading comprehension. *Reading Research Quarterly*, *54*(1), 63–80. https://doi.org/10.1002/rrq.219.
Feng, S. H., Wong, Y. K., Wong, L. Y., & Hossain, L. (2019). The Internet and Facebook usage on academic distraction of college students. *Computers & Education*, *134*, 41–49. https://doi.org/10.1016/j.compedu.2019.02.005.
Ferrer, E., Shaywitz, B. A., Holahan, J. M., Marchione, K. E., Michaels, R., & Shaywitz, S. E. (2015). Achievement gap in reading is present as early as first grade and persists through adolescence. *Journal of Pediatrics*, *167*(5), 11–21. https://doi.org/10.1016/j.jpeds.2015.07.045.
Fitria, D. A. (2010). *Pembaca Hebat Super Cepat*. Trans Mandiri Abadi.
Fırat, T., & Koyuncu, İ. (2021). Investigating Reading Literacy in PISA 2018 Assessment. *Lnternational Electronic Journal of Elementary Education*, *13*(2), 263–275. https://doi.org/10.26822/iejee.2021.189.
Foorman, B. R., Petscher, Y., & Herrera, S. (2018). Unique and common effects of decoding and language factors in predicting reading comprehension in grades 1-10. *Learning and Individual Differences*, *63*, 12–23. https://doi.org/10.1016/j.lindif.2018.02.011.
François, C., Chobert, J., Besson, M., & Scho¨n, D. (2013). Music training for the development of speech segmentation. *Cerebr. Cortex*, *23*(9), 2038–2043. https://doi.org/10.1093/cercor/bhs180.
Gall, M., Gall, J. P., & Borg, W. R. (2003). *Educational Research, Eight Edition*. Pearson Education.
Hjetland, H. N., Lervåg, A., Lyster, S.-A. H., Hagtvet, B. E., Hulme, C., & Melby-Lervåg, M. (2019). Pathways to reading comprehension: A longitudinal study from 4 to 9 years of age. *Journal of Educational Psychology*, *1*(2), 13–26. https://doi.org/10.1037/edu0000321.
Hua, A. N., & Keenan, J. M. (2017). Interpreting reading comprehension test results: Quantile regression shows that explanatory factors can vary with performance level. *Scientific Studies of Reading*, *21*(3), 225–238. https://doi.org//10.1080/10888438.2017.1280675.
Hulme, C., & Snowling, M. J. (2015). Learning to read: What we know and what we need to understand better. *Child Development Perspectives*, *7*(1), 1–5. https://doi.org/10.1111/cdep.12005.
Inawati, I., & Sanjaya, M. D. (2018). Kemampuan Membaca Cepat dan Pemahaman Siswa Kelas V SD Negeri OKU. *Jurnal Bindo Sastra*, *2*(1), 173–182. https://jurnal.um-palembang.ac.id/bisastra/article/view/927
Joyce, B., & Weil, M. (2003). *Models of Teaching*. Prentice Hall-Inc.
Junco, R. (2012). The relationship between frequency of facebook use, participation in facebook activities, and student engagement. *Computers & Education*, *58*(1), 162–171. https://doi.org/10.1111/j.1365-2729.2010.00387.x.
Kamalasari, V. (2012). Latihan Membaca Cepat Sebagai Upaya Meningkatkan Kemampuan Membaca Cepat dan Pemahaman Bacaan. *Basastra*, *1*(1). https://jurnal.unimed.ac.id/2012/index.php/basastra/article/view/189.
Kats, Y. (2010). *Learning Management System Technologies and Software Solutions for Online Teaching: Tools and Applications*. Information Science Reference.
Kirschner, P. A., & Karpinski, A. C. (2010). Facebook (R) and academic performance. *Computers in Human Behavior*, *26*(6), 1237–1245. https://doi.org/10.1016/j.chb.2010.03.024.

Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). Projecting the Potential Impact of COVID-19 School Closures on Academic Achievement. *Educational Researcher*, *49*(8), 549–565. https://doi.org/10.3102/0013189X20965918.

Language and Reading Research Consortium. (2015). Learning to read: should we keep things simple? *Reading Research Quarterly*, *50*(2), 151–169. https://doi.org/10.1002/rrq.99.

Lervag, A., Hulme, C., & Melby-Lervag, M. (2018). Unpicking the developmental relationship between oral language skills and reading comprehension: It's simple, but complex. *Child Development*, *89*(5), 1821–1838. https://doi.org/10.1111/cdev.12861.

Lonigan, C. J., Burgess, S. R., & Schatschneider, C. (2018). Examining the simple view of reading with elementary school children: Still simple after all these years. *Remedial and Special Education*, *39*(5), 260–273. https://doi.org/10.1177/0741932518764833.

Manoli, P., & Papadopoulou, M. (2012). Two Faces of the Same Coin. *Procedia - Social and Behavioral Sciences*, *46*(1). https://doi.org/S1877042812013341.

Mindog, E. (2016). Apps and EFL: A case study on the use of smartphone apps to learn English by four Japanese university students. *JALT CALL Journal*, *12*(1), 3–22. https://doi.org/10.29140/jaltcall.v12n1.199.

Muhyidin, A. (2017). Evaluasi Pembelajaran Membaca permulaan di kelas awal sekolah dasar. *Jurnal Program Studi PGMI*, *4*(2), 139–146.

Muls, J., Thomas, V., De Backer, F., Zhu, C., & Lombaerts, K. (2020). Identifying the nature of social media policies in high schools. *Education and Information Technologies*, *25*(1), 281–305. https://doi.org/10.1007/s10639-019-09971-7.

Nurani, R. Z., Nugraha, F., & Mahendra, H. H. (2021). Analisis kesulitan membaca permulaan pada anak usia sekolah dasar. *Jurnal Basicedu: Journal of Elementary Education*, *5*(3). https://jbasic.org/index.php/basicedu/article/view/907.

Nurhadi, N. (2008). *Teknik Jitu Menjadi Pembaca Terampil*. Pustaka Pelajar.

Riduwan. (2003). *Skala Pengukuran Variabel-Variabel Penelitian*. Alfabeta.

Schleicher, A. (2018). *PISA 2018 Insight and Interpretation*. Organization for Economic Co-operation and Development.

Silva, P. G. D., de Oliveira, C. A. L., Borges, M. M. F., Moreira, D. M., Alencar, P. N. B., Avelar, R. L., & Sousa, F. B. (2021). Distance learning during social seclusion by COVID-19: improving the quality of life of undergraduate dentistry students. *European Journal of Dental Education*, *25*(1), 124–134. https://doi.org/10.1111/eje.12583.

Soedarso, S. (2010). *Speed Reading: Sistem Membaca Cepat dan Efektif*. Gramedia Pustaka Utama.

Suggate, S., & Reese, E. (2012). Contemporary debates in childhood education and development. In *Contemporary Debates in Childhood Education and Development*. https://doi.org/10.4324/9780203115558.

Sulistyawati, E. E., & Sujarwo, S. (2016). Peningkatan kemampuan membaca permulaan melalui media video compact disc pada anak usia 5– 6 tahun. *Jurnal Pendidikan Dan Pemberdayaan Masyarakat*, *3*(1), 28. https://doi.org/10.21831/jppm.v3i1.8064.

Supriyono, K., & Sugirin, S. (2014). Pengembangan media pembelajaran membaca bahasa Inggris smp berbasis web. *Jurnal Inovasi Teknologi Pendidikan*, *1*(1), 49–64. https://journal.uny.ac.id/index.php/jitp/article/view/2459.

Swaminathan, S., & Schellenberg, E. G. (2020). Musical ability, music training, and language ability in childhood. *J. EXp. Psychol. Learn. Mem. Cognit*, *46*(12), 2340. https://doi.org/10.1037/xlm0000798.

Tervaniemi, M., Ilvonen, T., Karma, K., Alho, K., & Naatanen, R. (1997). The musical brain: brain waves reveal the neurophysiological basis of musicality in human subjects. *Neurosci. Lett*, *226*, 1–4. https://doi.org/10.1016/S0304-3940(97)00217-6.

Tierney, A., & Kraus, N. (2013). Music training for the development of reading skills. *Prog. Brain Res*, *207*, 209–241. https://doi.org/10.1016/B978-0-444-63327-9.00008-4.

Trianto, T. (2007). *Model-model Pembelajaran Inovatif Berorientasi Konstruktivistik*. Prestasi Pustaka.

Vongkrahchang, S., & Chinwonno, A. (2016). Effects of personal intelligence reading instruction on personal intelligence profiles of Thai university students. *Kasetsart: Journal of Social Sciences*, *30*(1). https://doi.org/S2452315116000084.

Wainwright, G. (2007). *Speed Reading Better Recalling*. Gramedia Pustaka Utama.

White, E. J., Hutka, S. A., Williams, L. J., & Moreno, S. (2013). Learning, neural plasticity and sensitive periods: implications for language acquisition, music training and transfer across the lifespan. *Front. Syst. Neurosci*, *7*, 90. https://doi.org/10.3389/fnsys.2013.00090.