

THE PRACTICALITY OF INTERACTIVE MULTIMEDIA SOFTWARE LECTORA INSPIRE TOWARDS LEARNING THEME 3 OF GRADE IV ELEMENTARY SCHOOL STUDENTS

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Abstract

The use of technology in the classroom today is still uneven because of teachers who prefer to use traditional media, such as the images found in student textbooks, rather than technology-assisted media. This leads to students becoming bored with their lessons, which results in less effective learning. In grade IV of an elementary school. The ADDIE methodology was applied in this research to generate interactive multimedia. Using the following methods: analysis, planning, development, application, and assessment. Response questionnaires, specifically those from students and teachers, are used to collect data. this study seeks to ascertain the usefulness of interactive multimedia development assisted by Lectora Inspire software. The research of the grade IV teachers at SDN 11 Tanjung Barulak's practicality test results showed that 91.66% of them met the requirements for being "extremely practical," and the examination of the student replies to the questionnaire showed that 89.94% of them did as well. As for the practicality of the class IV teacher response at SDN 02 Tanjung Barulak, 87.50% was included in the "very practical" criteria, and as for the practicality of the class IV student response at SDN 14 Tanjung Barulak, 96.38% was included in the "very practical" criteria, and as for the practicality of the class IV teacher response at SDN 02 Tanjung Barulak, 87.50% was included in the "very practical" criteria. and while the questionnaire for the practicality of student responses was 90.55% of the "very practical" criteria. By describing the effectiveness of interactive multimedia helped by lectora inspire software, a descriptive data analysis technique was utilized to analyze the data. The achieved practicality value reveals itself in extremely practical criteria, indicating that the interactive multimedia can be useful and make learning more convenient.

Keywords : interactive multimedia, lectora inspire; practicality

Abstrak

Pada zaman sekarang ini dengan memanfaatkan teknologi dalam proses pembelajaran masih belum merata yang disebabkan oleh guru yang cenderung menggunakan media konvensional berupa media gambar yang terdapat dalam buku paket siswa dan masih kurang menggunakan media berbantuan teknologi dalam pembelajaran yang menyebabkan siswa merasa bosan dalam kegiatan proses belajar sehingga pembelajaran menjadi kurang maksimal. Penelitian ini bertujuan untuk mengetahui nilai kepraktisan dari pengembangan multimedia interaktif berbantuan software lectora inspire yang diimplementasikan di kelas IV SD. Dalam penelitian ini model yang digunakan adalah model ADDIE. Dengan langkah yaitu, analisis, perencanaan, pengembangan, penerapan, dan evaluasi. Pengumpulan data menggunakan angket respon yaitu respon siswa dan guru. Teknik analisis data yang digunakan ialah teknik analisis data deskriptif yaitu dengan mendeskripsikan kepraktisan multimedia interaktif berbantuan software lectora inspire. Hasil analisis yang mendapatkan hasil uji kepraktisan guru Kelas IV SDN 11 Tanjung Barulak yang menunjukkan 91,66% dengan kriteria "sangat praktis", dan angket kepraktisan respon dari siswa menunjukkan 89,94% dimana termasuk dengan kriteria "sangat praktis". Sedangkan untuk respon guru Kelas IV SDN 14 Tanjung Barulak menunjukkan 93,66% dengan kategori "sangat praktis", dan untuk angket kepraktisan siswa menunjukkan 96,38% yang termasuk kedalam kriteria "sangat praktis", dan untuk kepraktisan dari respon guru Kelas IV SDN 02 Tanjung Barulak yaitu 87,50% termasuk ke dalam kriteria "sangat praktis", dan sedangkan angket kepraktisan respon siswa yaitu 90,55% kriteria "sangat praktis". Nilai kepraktisan yang diperoleh menunjukkan dalam kriteria sangat praktis yang diartikan bahwa multimedia interaktif yang dikembangkan dapat memberikan kemudahan dan membantu dalam penggunaannya dalam proses pembelajaran.

Kata Kunci: multimedia interaktif, lectora inspire; kepraktisan

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Introduction

In this era, we can feel the progress of information and communication technology, which has undergone changes, one of them is in the aspect of education. With this progress, it becomes a challenge for teachers to create innovations in using technology-assisted learning media because teachers still tend to use conventional media in the form of pictures found in student textbooks, resulting in less than optimal learning. In connection with the technological progress at present, technology skills become an essential aspect of education (Anggraini, 2021). With technology, teachers can support the delivery of material more effectively and efficiently so that the learning process can be more enjoyable (Mahmudah & Pustikaningsih, 2019). In line with the opinion of Putri et al. (2022), an innovation from the utilization of technology that can be implemented in the aspect of education is learning media.

Learning media that has kept up with technology advancements allows teachers easily and effectively to convey subject matter to students, making learning more enjoyable for them. In accordance with the idea (Fitria & Harun, 2020), as learning media develops, it is influenced by scientific and technological advancements that have an impact on various aspects of education. Media is a learning tool that can share the information directly or indirectly in the learning process (Simorangkir & Sembiring, 2018). In accordance with the idea (Mirzon et al., 2020) that employing technology to deliver materials has a big impact on being able to support teachers in the learning process, so that students can be motivated to learn. Moreover, (Indra & Fitria, 2021) state that the teachers who still use less varied learning media such as taking pictures from books cannot encourage students in learning activities. As stated by (Reinita & Effendi, 2020), interactive multimedia is a learning media which adapts to technological advancements that will give the benefit its users.

Meanwhile, regarding to Hofstetter the concept of interactive multimedia is a combination of a computer with an audio, readings and graphics as well as moving images along with links and tools (Deliany, 2019). Interactive multimedia is information from a message that interacts with individuals as well may be used by them through a display that the designer created to allow for flexible control of multimedia. Interactive multimedia is the upkeep of tools with control mechanisms that users can use to their choice and have a more tangible form display (Kurniawati & Nita, 2018). Regarding to Dewi and Haryanto (2019), multimedia is a form of media that employs computer help and combines two or more types in order to display materials, messages, and information

As per Jalinus's argument (Reinita, 2018), media is everything that concerns the effectiveness and efficiency of distributing materials during the learning process which can be utilized by using software and hardware. Based on Fitria & Harun (2020), that teachers can take advantage of current developing software to enhance learning media and make it more enjoyable and effective, including the existence of Lectora Inspire, Power Point, Adobe Flash, Macromedia Flash, and so on, which software has its own advantages and disadvantages. One example of utilizing software learning media is Lectora Inspire. According to (Nursidik et al., 2018), the Lectora Inspire application can be used when utilizing technology-based media in the learning process. The use of the Lectora Inspire software can be used offline or online in learning media. The advantages of lectora inspire software are that it facilitates the design of learning materials that may be enhanced with attractive graphics and animations to attract students' interest in their lessons (Simorangkir & Sembiring, 2018).

The results of the research, which included observations and interviews of the teachers at SDN 11 Tanjung Barulak, showed that teachers still primarily use textbooks to deliver learning materials, while technology-based learning media have begun to be used, such as showing instructional videos on YouTube and presenting a simple power point in front of the class. Additionally, the researcher conducted observations with the teacher who handled grade IV students at SDN 02 Tanjung Barulak. In this interview, the teacher confirmed that learning activities at this school still primarily utilized textbooks and conventional media in the form of media cards and media images that were displayed in front of the class, with no additional use of media technology. This is due to the fact that there are still not enough projectors available, preventing the use of technology-based learning materials. The last observation was supported by interviews with the teacher that teach in the class IV at SDN 14 Tanjung Barulak, which revealed that the teacher's focus to use textbooks in terms of media during learning activities. In addition, there are media that are only utilized in class and are displayed in front of the class. And in this school there are no teachers who develop technology-based learning media due to the limitations of teachers in understanding the use of software-assisted learning media or applications. By the observation and interview activities that have been conducted, the results show that the teacher is still focused on textbooks and the uneven use of technology-based media, so that students are less interested on the subject matter and students are still challenging to understand the learning materials because they only focus on textbooks in the learning process and have not attracted students' interest due to the use of conventional learning media.

Based on the problems above, an innovation is needed in the development of technology-assisted learning media. With the use of interactive multimedia in learning, it will be interesting and easy to understand learning material for students because there are videos and animations in learning media, so far only through textbooks and explanations from teachers, students feel bored and bored to participate in learning activities. Which is very much in line with the research conducted by Rido Afreneldi, et al (2021) Regarding interactive multimedia, his research's findings indicate that it should be used instead of traditional media in educational activities because it is the best and most appropriate alternative.

The findings from the three schools that were observed and interviewed led researchers to design research with the aim of determining the practicality of interactive multimedia Lectora Inspire software for teaching how to take care of living things. This was done in the hope of developing learning materials that can attract students' interest and increase their enthusiasm in learning activities in order to overcome the issues that the researchers discovered. Distributing questionnaires to teachers and students in class IV in order to determine the level of practicality and for the outcomes of the application of interactive multimedia during learning activities in research that will be carried out by researchers. According to (Nursidik et al., 2018), the Lectora Inspire application can be used when utilizing technology-based media in the learning process. While according to Zulvira & Ariani (2019), Lectora Inspire is an e-learning development tool that students may simply utilize to be able to increase their interest in studies and prevent boredom.

Research Methods

This type of research is a form of development research, or what is known as R&D employing the ADDIE model. R&D research is a process of developing and producing a product by conducting validity and practicality testing. This research was carried out to develop and test the practicality of learning media created with the help of Lectora Inspire software.

Researchers developed learning media in 3 schools in Nagari Tanjung Barulak, especially in grade IV elementary schools. This research was implemented for integrated thematic learning in theme 3, caring for living things in my environment, in sub-theme 1 animals and plants in my environment, in lessons 1 and 3, which were conducted twice a week. The research was conducted at SDN 11 Tanjung Barulak, SDN 14 Tanjung Barulak, and SDN 02 Tanjung Barulak.

While for the data collection technique in the study, use distributing a questionnaire. In order to get the practicality value in the research, it was obtained from the 2 selected subjects, namely from the distribution of teacher questionnaires and student questionnaires. In this study, the researchers chose the teachers and students as subjects, the class IV teachers at SDN 11 Tanjung Barulak and 29 students, the class IV teachers at SDN 14 Tanjung Barulak and 15 students, and the class IV teachers at SDN 02 Tanjung Barulak and 15 students. There are a number of factors to consider when choosing research topics at the school because there hasn't been any advancement in interactive multimedia, particularly when utilizing the Lectora Inspire program on theme 3 caring for living things in grade IV elementary schools using the ADDIE model. With school conditions that support conducting research and students who are in accordance with the needs of researchers so that they support being able to carry out interactive multimedia development.

The procedure in this development research process begins with carrying out observations and interviews with the aim of exploring and gathering information (Hamzah, 2019:33). Researchers observed the learning process in grade IV and conducted interviews with the grade IV homeroom teacher and several students. The model used in this development research is the ADDIE model. In the ADDIE model (Helsa & Fitria, 2019) mentions 5 steps that will be carried out, namely, analysis, planning, development, implementation, and evaluation. This is supported by Angko and Mustaji (2013: 4), "explaining the arguments for the reasons for using the ADDIE model which is still significant so it can be implemented, because ADDIE is a model that easily adjusts to various conditions with good times and until now this is still used the ADDIE model. The stages of the ADDIE model in development research are used as follows:

In the first stage, which is the analysis stage, the initial step is to identify the basic problems, facts, and gaps that occur in the learning process of fourth-grade students. During this analysis stage, the researcher conducts activities such as (a) conducting a needs analysis and (b) analyzing the material through observation and interviews. The second stage is the design stage, which aims to design and produce interactive multimedia assisted by Lectora Inspire software. This interactive multimedia is designed and developed to optimize the increasingly rapid development of learning and to assist teachers in the learning process so that the use of media is more varied, interesting, and easily understood by students and adapted to the Theme, Subtheme, KI, KD, and Indicators. Steps related to the design stage include designing validation instruments that will be validated by experts. The third stage is the development stage, which is the product that has been designed and will then be validated against the product. The product will be assessed by experts based on the instrument prepared, and the product will be assessed in terms of material, language, and media aspects. The fourth stage is implementation, where the researcher develops the product that has been made and has been validated and declared feasible to be applied in learning. After the learning activities, the designated subjects will fill out practicality sheets related to the product to determine the quality and efficiency in learning. Aspects assessed include (a) Presentation, (b) Display, (c) Language, and (d) Ease of use. The evaluation stage is the last stage conducted by the

researcher. The results obtained from questionnaires filled out during the implementation stage in the form of teacher response questionnaires and student response questionnaires are used to evaluate the practicality of the interactive multimedia assisted by Lectora Inspire software.

The data obtained in this study are based on validation and practicality instruments. The data from the results of the instruments of the developed interactive multimedia are valid and practical. Validation instruments are used to determine the validity of interactive multimedia developed based on validation sheets to collect data. Meanwhile, practicality instruments are used to collect data in the form of practicality obtained from the distribution of instruments to teachers and students based on interactive multimedia that has been developed.

The data obtained from this research was collected from the implementation of interactive multimedia practical tests assisted by Lectora Inspire software, with the distribution of response questionnaires to teachers and students. The data analysis technique used to assess the practicality level of the implemented product is based on the assessment scales of the questionnaires completed by teachers and students, as follows:

Table 1. Teacher and Student Questionnaire Assessment Scale

Range	Conversion
1	Strongly Disagree
2	Don't agree
3	Agree
4	Strongly agree

Source: Modification from Arikunto (2014: 285)

The final value of the questionnaire calculation was analyzed using a modified formula from Purwanto (2013: 102), namely:

$$NP = \frac{R}{SM} \times 100\%$$

Information :

NP= The percent value you are looking for

R = Score Acquisition

SM= Maximum Score

Meanwhile, the calculation of the final grade can categorize the practicality of interactive multimedia assisted by the Lectora Inspire software, which can be seen in the following table: Researchers developed learning media in 3 schools in Nagari Tanjung Barulak, especially in grade IV elementary schools.

Table 2. Practicality Category

Interval	Category
81,26 – 100 %	Very Practical
62,5 - 81,25 %	Practical
43,76 – 62,50 %	Quite Practical
25,00 – 43,75 %	Impractical

Source: Modifications from Purwanto (2013: 103)

Results and Discussion

By applying the ADDIE model to the development of interactive multimedia, it can show the practical results of the research. This is consistent with what (Salahuddin, et al., 2020) who stated that development research is a process used by researchers to develop and validate educational products that have been developed. In this study, the primary type of data was gathered for this study and the data was obtained directly. The results of practicality trials

are statistics from the response questionnaire that given to teachers and students in the class. In the learning process that has been implemented, the researcher distributes questionnaires to find out the practicality of using media.

The first stage of analysis was divided into two parts: needs analysis and material analysis. The results of the needs analysis, based on observations and interviews conducted by the researcher, showed that students need technology-based learning media that can attract their interest in learning and make it easier for them to understand the learning materials. This, in turn, motivates and excites students during the learning process. By using Lectora Inspire, the learning materials can be designed as interesting as possible, featuring videos and animation images related to the learning materials so that students pay more attention to what the teacher is conveying.

As for the material analysis, the researcher followed the 2013 revised 2017 curriculum guidelines. The learning materials supported by Lectora Inspire software include topics on science, social studies, and Indonesian language. In science, the learning material covers the balance and preservation of natural resources, as well as the functions of plant parts. In social studies, the material covers highlands, lowlands, and coasts. Lastly, in Indonesian language, the material covers interviews.

The second stage of design involved designing and developing this interactive multimedia as an optimization of the rapidly developing learning process. The multimedia was designed to help teachers in the learning process and to provide students with varied, interesting, and easy-to-understand learning media. This multimedia was developed in accordance with the themes, sub-themes, KI, KD, and indicators of fourth-grade students in elementary school. The developed learning media is an interactive multimedia assisted by Lectora Inspire software, which is displayed using an LCD projector. The following is an image of the interactive multimedia using Lectora Inspire software.



Figure 1. Results of interactive multimedia design

The third stage, Development, involves the development of interactive multimedia with the help of Lectora Inspire software. This multimedia has been designed and will be validated by three validators in their respective fields of expertise: material expert validator, language expert validator, and media expert validator. The multimedia will then be revised based on the input from the validators. The following are the results of the validation conducted on the interactive multimedia:

Table 3. Average Score of Expert Validation

Validation	Results Persentase	Category
Material Expert	93,33 %	Very Valid
Linguist	95 %	Very Valid
Media Expert	91,66 %	Very Valid
Average	93,33 %	Very Valid

The table above shows that the material expert validator obtained a very valid result with an overall assessment of 93.33% validity with some revisions needed. The researcher discussed the multimedia content with the validators regarding four aspects: suitability of instructional objectives, relevance of knowledge and skills, clarity of objectives, and accuracy of the learning materials for Theme 3, Subtheme 1: Caring for Living Creatures in My Environment. The validation sheet results showed that the language conventions used in the multimedia were very valid with a validity rate of 95%. The language expert validator assessed the readability of the text and the use of appropriate punctuation based on EYD. Based on the validation sheet results and discussions with the validator, the presentation and graphics of the multimedia were very valid with an overall validity rate of 91.66%, evaluated based on systematic presentation order, the ability to motivate and attract learners, and providing interaction (response). The graphic aspects were assessed based on the use of menu buttons, attractive design, and clear images and videos. The overall validation score was 93.33%, indicating that the multimedia with the help of Lectora Inspire software is suitable for learning media.

The fourth stage, implementations (Application) Products that have been validated and revised and declared fit for use by the three expert validators are then carried out product trials, namely is the schools that have been chosen by researchers in this study are SDN 11 Tanjung Barulak, SDN 14 Tanjung Barulak and SDN 02 Tanjung Barulak. When a product is finished and deemed safe for use, it is tested on small-scale subjects, specifically in one class by teachers and students using practicality tests. So the total research subjects were 59 students and 3 teachers, where the purpose of this implementation was to see the practicality of the products made. The implementation stage of interactive multimedia in learning can support improving understanding of theory which will lead to improved better results and attract more students' interest in the learning process. Following the use of interactive multimedia, the final calculation and practicality categories were completed in order to determine the outcomes of the practicality data from the distributed questionnaires. Responses from students and teachers are required to support this practicality while creating interactive multimedia using the Lectora Inspire program.

Interactive multimedia practicality data will be obtained after the questionnaires are distributed to the subjects at SDN 11 Tanjung Barulak, followed by distribution to class IV at SDN 14 Tanjung Barulak, and then to teachers and students at SDN 02 Tanjung Barulak. Practical data is obtained after the learning material is completed with the use of media that has been made using the Lectora Inspire software, so the questionnaire that is distributed is data

that supports the value of practicality. The teacher's response is required in order to support the realism of the process of creating media products using Lectora Inspire software. According to research on the use of interactive multimedia at SDN 11 Tanjung Barulak, teachers were able to achieve a practicality percentage of 91.66% with the "Very Practical" criteria for their assessments, and teachers at SDN 14 Tanjung Barulak were able to achieve a practicality percentage of 91.66% with the "Very Practical" criteria, and the last one at SDN 02 Tanjung Barulak with the criteria "Very Practical" with the percentage of practicality by the teacher reaching 87.50%. Based on the results, the Lectora Inspire software was used by class IV teachers at SDN 11 Tanjung Barulak, SDN 14 Tanjung Barulak, and class IV teachers at SDN 02 Tanjung Barulak to conduct an assisted interactive multimedia practical questionnaire, it was determined that this learning media is useful for assisting teachers in learning activities and conveying learning material.

Furthermore, product trials were conducted to assess practicality after the learning process was complete, and the collection was carried out on 29 class IV students at SDN 11 Tanjung Barulak, 15 class IV students at SDN 14 Tanjung Barulak and 15 students class 02 Tanjung Barulak, with a total of 59 test subjects. The results of calculating the practicality sheet filled in by students at SDN 11 Tanjung Barulak get a total score of 89.94% (very practical), for class IV students at SDN 14 Tanjung Barulak get a percentage score of 96.38% (very practical), and for class IV SD students SDN 02 Tanjung Barulak got a score of 90.55%.

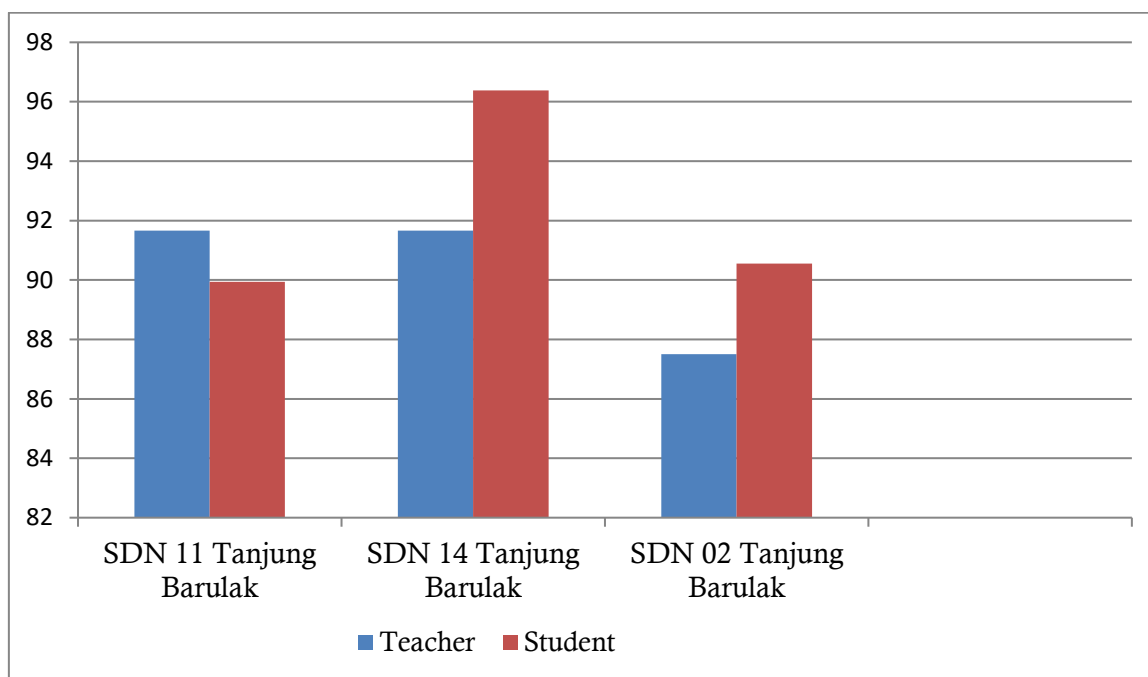


Figure 2. Practicality percentage score result graph

Based on the results above, several aspects that are assessed by the teacher are the use of interactive multimedia to make it simpler to explain the material to students, the use of language in interactive multimedia that is correct and appropriate in EYD, and presenting sentences that are easy to understand, helping teachers offer images in interactive multimedia which make students easier to understand the material being taught. Because there are no difficulties in using interactive multimedia products, teachers and students can see data on practicality after using them. Interactive multimedia developed shows responses from students

and teachers who find it simple to understand the material in use when implemented in the field, which explains that this interactive multimedia is categorized as practical.

While the appearance of the interactive multimedia used, the use of precise and understandable language in learning media, the use of writing, colors, and pictures on products that are made to make it easier to understand learning, and interest in learning by using the media that has been made are all assessed factors that contribute to the percentage results for students. However, the media with the assistance of Lectora Inspire learning really supports in understanding the learning material better, the practice questions in the learning media require me to study hard. Based on the percentage of responses and comments received in response to the questionnaire, it can be concluded that, in general, students enjoy using educational software created by researchers since it helps them better visualize the subject being learned.

The fifth stage, Evaluation, is the final stage of the research. It is based on feedback obtained from the validators' questionnaire responses and evaluation of the implementation phase by teacher and student respondents. These questionnaires were used to determine the practicality of the interactive multimedia with the help of Lectora Inspire software.

Conclusion

The learning media produced in this development research is an interactive multimedia assisted by the lectora inspire software with the ADDIE development model. The practical value of using interactive multimedia in learning is a feasibility test from interactive multimedia products to be feasible to be implied in class IV SD. Interactive multimedia assisted by the Lectora Inspire software is designed with pictures, videos and attractive colors and uses language that is easy to understand. This is known from the average validity test of the three experts, namely 93.33% with a very valid category.

According to the practicality test of SDN 11 Tanjung Barulak grade IV teachers, the Lectora Inspire software-assisted learning media seems to be very helpful to use, with a percentage of 91.66% in the very practical category. Meanwhile, the response of SDN 11 Tanjung Barulak grade IV students, 89.94% of the category, was very practical. The trial at SDN 14 Tanjung Barulak received a very practical response through a questionnaire filled with a percentage score of 91.66%. Besides that, data on practicality was collected through the distribution of questionnaires to students who received a percentage score of 96.38% with a very practical category, and then the trial conducted at SDN 02 Tanjung Barulak received a practical response through a questionnaire was filled by a percentage score of 87.50% very practical. Besides that, data on practicability was collected through questionnaires being distributed to students who scored a percentage score of 90.55% in the very practical category. It can be concluded that the practicality of developing interactive multimedia in class IV thematic learning, especially in Theme 3 Caring for Living Creatures Sub-theme 1 Animals and Plants in My Home Environment in Learning 1, is included in very practical criteria that can be implied in learning activities. Besides that, it can be ascertained as an alternative learning media to make learning higher quality.

Bibliography

- Anggraini, W. (2021). *Reformasi Pendidikan Menghadapi Tantangan Abad 21*. 03(03), 208–215.
- Angko, Nancy., dan Mustaji. (2013). Pengembangan Bahan Ajar dengan Model ADDIE Untuk Mata Pelajaran Matematika Kelas 5 SDS Mawar Sharon Surabaya. *Jurnal*

Kwangsan. 1(1). 1-15.

- Arikunto, Suharsimi. (2014). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta : Rineka Cipta
- Deliany, N., Hidayat, A., & Nurhayati, Y. (2019). Penerapan Multimedia Interaktif untuk Meningkatkan Pemahaman Konsep IPA Peserta Didik di Sekolah Dasar. *Educare*, 17(2 SE-Research), 90–97. <http://jurnal.fkip.unla.ac.id/index.php/educare/article/view/247>
- Dewi, S. R., & Haryanto, H. (2019). Pengembangan multimedia interaktif penjumlahan pada bilangan bulat untuk siswa kelas IV sekolah dasar. *Premiere Educandum : Jurnal Pendidikan Dasar Dan Pembelajaran*, 9(1), 9. <https://doi.org/10.25273/pe.v9i1.3059>
- Di, R., & Dasar, S. (2018). *Pelatihan Media Berbasis Adobe Flash Cs6 Dengan Pendekatan Value Clarification technique. 1*, 61–68.
- Effendi, R., & Reinita, R. (2020). Peningkatan Hasil Belajar pada Pembelajaran Tematik Terpadu Menggunakan Model Cooperative Script di Kelas IV SD. *Jurnal Pendidikan Tambusai*, 4(3), 1814–1819. <https://doi.org/10.31004/jptam.v4i3.640>
- Hamzah, Amir. (2019). *Metode Penelitian dan Pengembangan (Research & Development) : Uji Produk Kuantitatif dan Kualitatif Proses dan Hasil Dilengkapi Contoh Proposal Pengembangan Desain Uji Kualitatif dan Kuantitatif*. Malang : CV Literasi Nusantara Abadi
- Harun, G. J., & Fitria, Y. (2020). *Desain Multimedia Interaktif Berbantuan Software Adobe Flash CS6 untuk Siswa Kelas V SD. 8*.
- Helsa, Yullys., & Fitria, Yanti.. (2019). Pengembangan Model Pembelajaran Science ter-Integrasi Mathematics Berbasis PBL. *Jurnal Ilmiah Teknologi Pendidikan. 7(1)*. 1-11.
- Indra, W., & Fitria, Y. (2021). *Pengembangan Media Games IPA Edukatif Berbantuan Aplikasi Appsgeyser Berbasis Model PBL untuk Meningkatkan Karakter Peduli Lingkungan Siswa Sekolah Dasar. 9(1)*, 59–66. <https://doi.org/10.25273/jems.v9i1.8654>
- Kurniawati, I. D., & Nita, S.-. (2018). Media Pembelajaran Berbasis Multimedia Interaktif Untuk Meningkatkan Pemahaman Konsep Mahasiswa. *DoubleClick: Journal of Computer and Information Technology*, 1(2), 68. <https://doi.org/10.25273/doubleclick.v1i2.1540>
- Mahmudah, A., & Pustikaningsih, A. (2019). Pengembangan Media Pembelajaran Interaktif Berbasis Lectora Inspire Pada Materi Jurnal Penyesuaian Untuk Siswa Kelas X Akuntansi Dan Keuangan Lembaga Smk Negeri 1 Tempel Tahun Ajaran 2018/2019. *Jurnal Pendidikan Akuntansi Indonesia*, 17(1), 97–111. <https://doi.org/10.21831/jpai.v17i1.26515>
- Mirzon Daheri, Juliana, Deriwanto, A. D. A. (2020). Jurnal basicedu. *Jurnal Basicedu*, 3(2), 524–532.
- Nursidik, H., Resti, I., Suri, A., Kandis, W., & Lampung, B. (2018). *Media Pembelajaran Interaktif Berbantu Software Lectora inspire. 1(68)*, 237–244.
- Purwanto, Ngalm. (ed). (2013). *Prinsip-Prinsip dan Teknik Evaluasi Pengajaran*. Bandung: Remaja Rosdakarya.
- Putri, A., Guru, P., Dasar, S., & Padang, U. N. (2022). *Pengembangan Media Video Powtoon Pada Pembelajaran Tematik Terpadu Berbasis Model Problem Based Learning (Pbl) Di Kelas Iv Sekolah Dasar E-ISSN 2621-0703 P-ISSN 2528-6250. 7(1)*, 1–8.

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- Simorangkir, F. M. A., & Sembiring, R. K. B. (2018). Peningkatan Kemampuan Number Sense Siswa Melalui Media Pembelajaran Matematika Berbantuan Software Lectora Inspire. *MES: Journal of Mathematics Education and Science*, 4(1), 29–35. <https://doi.org/10.30743/mes.v4i1.866>
- Zulvira, R., & Ariani, Y. (2019). *Pengembangan Bahan Ajar Penyajian Data Berbasis Lectora Inspire dengan Pendekatan CTL di Kelas IV* Development of Data Presentation Teaching Materials Based of Lectora Inspire with CTL Approach In Class IV. 7(2), 1–15.