ANALYSIS OF THE LEVEL OF SUITABILITY AND DEPTH OF MATERIAL IN THE SARASAH KAJAI WATERFALL PHYSICS EDUPARK E-BOOK IN ACCORDANCE WITH THE MERDEKA CURRICULUM

UNDERGRADUATE THESIS

Submitted as one of the requirements to get a degree of
Bachelor of Education

By:
ETRI ALGA VRIMESTY
20033041/2020

PHYSICS EDUCATION OF STUDY PROGRAMS
DEPARTMENT OF PHYSICS
FACULTY OF MATHEMATICS AND NATURAL SCIENCE
UNIVERSITAS NEGERI PADANG

2024

UNDERGRADUATE THESIS APPROVAL

Tittle	: Analysis of the Level of Suitability and Depth of Material in the Sarasah Kajai Waterfall Physics Edupark E-book in accordance with the Merdeka Curriculum
Name	: Etri Alga Vrimesty
Student ID	: 20033041
Study Program	: Physics Education
Department	: Physics
Faculty	: Mathematics and Natural Science

Padang, 12 August 2024

Approved by :

Head of Department

Prof. Dr. Asrizal, M.Si
NIP. 196606031992031001

Supervisor

Dr. Hamdi, M.Si
NIP. 196512171992031003

VALIDATION OF PASSING THE UNDERGRADUATE THESIS TEST

Name	:	Etri Alga Vrimesty
Student ID	:	20033041
Study Program	:	Physics Education
Department	:	Physics
Faculty	:	Mathematics and Natural Science

Analysis of the Level of Suitability and Depth of Material in the Sarasah Kajai Waterfall Physics Edupark E-book in accordance with the Merdeka Curriculum

It is declared that have passes after being defended by the undergraduate thesis in front of the Undergraduate Examination Team

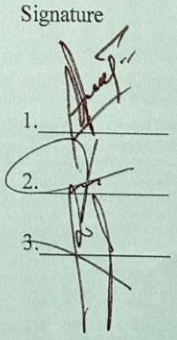
Department of Physics, Faculty of Mathematics and Natural Science

Universitas Negeri Padang

Padang, 12 August 2024

Examiner Team

No	Examiner Team	Name	Signature
1.	Chairman	Dr. Hamdi, M.Si.	1.
2.	Member	Dr. Ahmad Fauzi, M.Si.	2.
3.	Member	Rio Anshari, M.Si.	3.



STATEMENT OF NON-PLAGIARISM

I, the undersigned:

Name	: Etri Alga Vrimesty
NIM/TM	: 20033041/2020
Study Program	: Physics Education
Department	: Physics
Faculty	: Faculty of Mathematics and Natural Sciences

Hereby declare that my thesis with the title: "Analysis of the level of Suitability and Depth of Physics Material in the Physics Edupark E-book of Sarasah Kajai Waterfall in accordance with the Merdeka Curriculum" is truly my work and is not a plagiarism of other people's work. If at any time it is proven to plagiarize, I am willing to be processed and accept academic and legal sanctions in accordance with applicable laws and regulations, both at Padang State University Institution and in society and State law.

Thus, I make this statement with full awareness and a sense of responsibility as a member of the scientific community.

I hereby declare,

Etri Alga Vrimesty
NIM. 20033041

ABSTRACT

Etri alga vrimesty : Analysis of the Level of Suitability and Depth of Material in the Sarasah Kajai Waterfall Physics Edupark E-book in accordance with the Merdeka Curriculum

E-books are digital books in electronic form consisting of text, images or both, and are produced or published via computer or mobile. Yunita (2022) has developed a high school physics edupark E-book integrated with Sarasah Kajai Waterfall Destination and a scientific approach to the industrial revolution 4.0 by utilizing the Waterfall as an edupark or educational park. The edupark e-book was developed during the 2013 curriculum and is now implementing the Merdeka curriculum. To find out that the e-book is in accordance with the curriculum, an analysis of the level of suitability and depth of material is carried out in accordance with the current curriculum, namely the Merdeka curriculum. The 2013 curriculum prioritizes learning with a scientific approach while the Merdeka curriculum optimizes content so that students have plenty of time to explore concepts and strengthen competencies. This study aims to determine the level of suitability and depth of material in the Sarasah Kajai Waterfall physics edupark E-book in accordance with the Merdeka curriculum.

The type of research conducted is descriptive research with a qualitative approach. The population in this study were all Physics Edupark E-books. The samples used in this study were the Physics Edupark E-book Sarasah Kajai Waterfall. Data on the suitability and depth of material taken in this study using research analysis instruments and data collection techniques using documentation studies. The results of the level of suitability and depth of material are measured based on suitability and depth of material parameters.

The results showed that the level of suitability of physics material measured based on three dimensions of knowledge (factual, conceptual and procedural) was 84.45% with a very suitable category. Furthermore, the level of depth of physics material assessed based on BSNP indicators is 76.83% in the deep category. The results showed that the material analyzed was very appropriate and deep. However, the description of the material in the Sarasah Kajai Waterfall Physics Edupark E-book has not been described based on content standards in accordance with the Merdeka curriculum. Thus, the Sarasah Kajai Waterfall Physics Edupark E-book can’t be applied in schools that have implemented the Merdeka curriculum.

Keywords : E-book, Edupark, Appropriateness of Material, Depth of Material, Sarasah Waterfalls

PREFACE

Praise and gratitude to Alloh SWT, who has bestowed His grace, gifts and guidance so that the thesis entitled Analysis of the Level of Suitability and Depth of Material in the Physics Edupark E-book of Sarasah Kajai Waterfall in accordance with the Merdeka Curriculum can be completed. The writing of this thesis is a requirement in completing the Undergraduate Program (S1) and obtaining a Bachelor of Education degree in the Department of Physics, Faculty of Mathematics and Natural Sciences, Padang State University. This thesis is part of one of the outcomes of Master Thesis Research on behalf of Dr. Hamdi, M.Si., in 2023 funded by DRTPM with contract number 143/E5/PG.02.00.PL/2023 and Padang State University with contract number 2357/UN35.15/LT/2023.

The preparation of this thesis is inseparable from the help of various parties. For that, thank you to:

1. Dr. Hamdi, M.Si., as the Thesis Supervisor who with patience and sincerity has taken the time to guide, provide direction and motivation until the completion of the research and writing of this thesis;
2. Dr. Ahmad Fauzi, M.Si., as the examining lecturer who has provided advice and guidance in completing this thesis;
3. Rio Anshari, M.Si., as the examining lecturer and expert who has provided advice and guidance in completing this thesis; 4;
4. Rahmat Hidayat M.Si., as the academic advisor and expert who with patience and sincerity has taken the time to guide, provide direction and motivation during lectures.
5. Prof. Dr. Asrizal M.Si., as Head of Physics Department as well as Head of Physics Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Negeri Padang;
6. Mrs. Dea Stivani Suherman, S.Pd., M.Pd. as an expert who has provided advice and input in the validation process of the instrument for analyzing the level of suitability and depth of material in the Sarasah Kajai Waterfall Physics Edupark E-Book in accordance with the Merdeka Curriculum;

7. Mr. and Mrs. teaching staff and employees of the Department of Physics, Faculty of Mathematics and Natural Sciences, Padang State University;Teristimewa kepada orang tua dan keluarga besar tercinta yang telah memberikan kesungguhan do'a, dorongan, motivasi, dan bantuan moril maupun materil dalam menyelesaikan skripsi ini;
8. Mrs. Listia Ariska, S.Pd. as a physics teacher at SMA N 1 Talamau who has helped a lot in the research process of this thesis;
9. Friends, brothers, sisters, akhwat wisma WAC2, edupark teams, and magnetic teams who always provide enthusiasm, prayers and support during the preparation of this thesis;

May the help and guidance that you have given be a good deed and be rewarded with multiple rewards by Alloh SWT. This thesis has shortcomings and weaknesses. On this basis, suggestions are expected in perfecting this thesis. Hopefully this thesis is useful for all readers.

Padang, September 2024

Writer

Etri Alga Vrimesty

NIM 20033041

LIST OF CONTENT

		Page
ABSTRACT		i
PREFACE		ii
LIST OF CONTENT		iv
LIST OF TABLE		vi
LIST OF FIGURE		vii
LIST OF APPENDICES		viii
CHAPTER I INTRODUCTION		1
A.	Background of the Research Problem	1
B.	Identification of the Research Problem	3
C.	Limitation of the Problem	4
D.	Formulation of the Research	4
E.	Purposes of the Research	5
F.	Benefits of the Research	5
CHAPTER II LITERATURE REVIEW		6
A.	Literature Review	6
B.	Relevant Research	37
C.	Framework of Thought	40
CHAPTER III RESEARCH METHODS		42
A.	Research Type and Approach	42
B.	Population and Sample	42
C.	Research instruments	43
D.	Research Procedure	47
E.	Data Collection Technique	49
F.	Data Analysis Technique	49

Page

CHAPTER IV RESEARCH RESULTS AND DISCUSSION 52

A. Research Results 52

B. Discussion 64

CHAPTER V CLOSING 76

REFERENCES 78

APPENDICES

LIST OF TABLE

Page

Table 1. Differences between the 2013 Curriculum and the Merdeka Curriculum 14
Table 2. Physics concepts in Sarasah Kajai Waterfall 35
Table 3. Descriptors of material suitability 44
Table 4. Descriptors of material depth 45
Table 5. Instrument Format for Analyzing the Suitability of Physics Edupark E-Book Material with Merdeka Curriculum 45
Table 6. Instrument Format for Analyzing the Depth of Physics Edupark E-Book Material with Merdeka Curriculum and SMA/MA Physics Books 45
Table 7. Category of Instrument Validity Level 47
Table 8. Results of Validity Calculation Instrument Analysis of Suitability and Depth of Material in E-Book Edupark Physics Sarasah Kajai Waterfall 47
Table 9. Criteria for Material Suitability 51
Table 10. Criteria for Depth of Material 51
Table 11. Data from the Analysis of the Suitability of Physics Material in the Edupark E-Book with Physics material SMA/MA class XI semester 1 54
Table 12. Data on the results of the analysis of the suitability of physics material in the Edupark E-Book with SMA/MA Physics material class XI semester 2. 56

LIST OF FIGURE

Page

Figure 1. Location Map of Sarasah Kajai Waterfall, West Pasaman 34
Figure 2. Thinking Framework 41
Figure 3. FishBone Diagram of Research Analysis of the Level of Suitability and Depth of Physics Material in E-Book Edupark Physics Sarasah Kajai Waterfall 48
Figure 4. Data Analysis of the Suitability and Depth of Material in the Physics Edupark E-book with the Merdeka Curriculum 50
Figure 5. Level of Suitability of Physics Materials 52
Figure 6. Suitability of Edupark E-Book Physics Material with SMA/MA physics material class XI Semester 2 55
Figure 7. Level of Depth of Material on Each Physics Material 57
Figure 8. Level of Depth of Physics Material on each Indicator 58
Figure 9. Percentage of Depth of Material that contains Explanation of Concepts 59
Figure 10. Percentage of Depth of Material that contains Explanation of Definitions 60
Figure 11. Percentage of Depth of Material that contains Explanation of Principles 60
Figure 12. Percentage of Depth of Material that contains Explanation of Procedures 61
Figure 13. Percentage of Depth of Material that contains Explanation of Examples 62
Figure 14. Percentage of Depth of Material that contains Explanations Training 63
Figure 15. Percentage of Depth of Material that contains Explanation Material Description 63

LIST OF APPENDICES

Page

Appendix 1. Analysis of the material of the Sarasah Kajai Waterfall Physics Edupark E-Book with Merdeka Curriculum Materials..... 82

Appendix 2. Results of the Analysis of the Depth of Physics Material in the Physics *Edupark E-Book* of Sarah Kajai Waterfall with Physics Standard Books 159

Appendix 3. Data Processing Results of Analysis of the Suitability of Physics Material in the Physics Edupark E-Book of Sarasah Kajai Waterfall with Physics Material of the Merdeka Curriculum..... 185

Appendix 4. Results of Data Processing Analysis of the Depth of Physics Material in the Sarasah Kajai Waterfall Physics Edupark E- Book and Merdeka Curriculum Physics Book with Physics Standard Book..... 186

Appendix 5. Evidence of Improvement Sheet of Research Instrument by Validator 187

Appendix 6. Results of Instrument Validation Sheet by Validator..... 197

CHAPTER I
INTRODUCTION

A. Background of the Research Problem

Physics is a natural science that studies the interaction between energy and matter which is the basis of natural science. Physics is a science that studies the occurrence of natural phenomena that include material components and their interactions. Physics is built from theoretical laws, concepts, and applications (Eka Erlinawati & Bektiarso, 2019). To study natural phenomena, physics uses a process starting from observation, measurement, analysis, and drawing conclusions. These stages are scientific attitudes that can be carried out in the learning process. Learners are required to understand physics concepts with natural phenomena and find relationships between realities for problem solving by observing these phenomena (Arni Yunita & Rifai, 2023).

Physics learning is one of the science learning that includes the process of understanding basic concepts in physical science and its application in various situations. Physics learning is a process of building knowledge in studying various physical phenomena that occur in the universe and understanding the concepts of science through learning activities that lead to scientific activities. Physics learning is needed to study natural phenomena that require thinking skills, so as to understand the principles and concepts of physics. In order for physics learning to run well, it can be supported with various learning resources, one of which is teaching materials. various learning resources, one of which is physics edupark-based teaching materials.

Physics edupark is a place that has beauty value and can be used as a learning resource. Edupark is a place that has entertainment value (tourism) as well as a place to learn (Lestari & Rifai, 2020). physics edupark is a natural or artificial park that allows for a learning process that can help teachers and students in finding facts, formulating principles and concepts of physics (Rifai, 2019). Learning becomes more enjoyable if a tourist area or tourist destination is chosen as a learning environment. In general, visitors to tourist attractions take advantage of the beauty of nature and travel only for photography, sports such as jogging, hiking, camping, and holding family events or light outdoor activities.

The utilization of Edupark as a learning resource through natural and artificial tourist attractions shows a change in the way of thinking about physics which was previously considered boring, complicated and monotonous, even though physics is also learned in a fun context. There have been many results of the development of physics edupark-based teaching materials carried out, including the development of a physics edupark textbook for Semurup hot springs, Kerinci based on inquiry-based learning for SMA/MA levels (Anggara & Rifai, 2019), development of high school physics edupark e-book class X with a scientific approach integrated with the potential of the Bukik Chinangkiek tourist park area (Lestari & Rifai, 2020), physics e-book design based on the South Solok Hot Waterboom edupark using Flip Pdf Professional for SMA/MA students, and the development of a high school physics edupark e-book integrated with Sarasah Kajai Waterfall

Destination and a scientific approach to the industrial revolution 4.0 (Arni Yunita, 2023).

Among the teaching materials developed are e-books or often known as digital books. E-Books are electronic versions of books that can be read on a laptop screen or other portable devices and can combine features such as images, video, audio, hyperlinks that allow interaction between students and teachers (Wahyuni & Rahayu, 2021). E-books are one of the solutions provided by the government through the Ministry of Education and Culture of the Republic of Indonesia to overcome the high cost of existing books and to reduce logging of forests as one of the raw materials for paper.

The physics edupark e-book of Sarasah Kajai Waterfall with a scientific approach that has been made by Yunita & Rifai (2022) is a newly developed e-book and shows that this physics edupark e-book has been tested for validity and practicality, the test results show that the physics edupark e-book has been valid and practical. However, the edupark e-book was developed during the 2013 curriculum while now it has implemented an Merdeka curriculum. To find out whether the developed edupark e-book is in accordance with the Merdeka curriculum, an analysis of the level of suitability and depth of material in the Sarasah Kajai Waterfall physics edupark e-book with the Merdeka Curriculum is carried out.

B. Identification of the Research Problem

After describing the background of the problem, the following problems can be identified in the study:

1. Physics Edupark based e-books have been developed, but the level of material conformity with the Merdeka Curriculum has not been analyzed.
2. Physics Edupark based e-books have been developed, but the level of material depth has not been analyzed in accordance with the Merdeka Curriculum.

C. Limitation of the Problem

Based on the identification of the problems above, the researcher limits the problems to be studied. The problem restrictions are:

1. The e-book to be analyzed is an e-book by Yunita & Rifai (2022), namely the Physics Edupark of Sarasah Kajai Waterfall, West Pasaman Regency, West Sumatra.
2. Research will be conducted on the level of suitability and depth of physics material in the Sarasah Kajai Waterfall Physics Edupark E-book in accordance with the material in the Merdeka curriculum.
3. The level of material suitability is only measured based on 3 (three) dimensions of knowledge (factual, conceptual, and procedural).
4. The material to be analyzed is the material in the physics Edupark E-book Sarasah Kajai Waterfall Phase F.

D. Formulation of the Research

Based on the background that has been stated, the problem formulations in this study are:

1. What is the level of suitability of physics material in the Sarasah Kajai Waterfall Physics Edupark E-book according to the Merdeka curriculum?

2. What is the level of depth of physics material in the Sarasah Kajai Waterfall Physics Edupark E-book in accordance with the Merdeka curriculum?

E. Purposes of the Research

Based on the problem formulation that has been stated above, the objectives of this study are:

1. To determine the level of conformity of physics material based on the E-book Edupark Physics Sarasah Kajai Waterfall with the Merdeka curriculum.
2. Knowing the level of depth of physics material in the Physics Edupark E-book of Sarasah Kajai Waterfall with the Merdeka curriculum.

F. Benefits of the Research

The benefits of this research are:

1. For researchers, as a provision of knowledge and fulfill one of the requirements to obtain a Bachelor of Education (S.Pd.) degree in the Physics Education Study Program, Physics Department, FMIPA, Universitas Negeri Padang.
2. As a consideration for teachers in using the Sarasah Kajai Waterfall Physics Edupark E-book in the learning process.
3. As a source of reference for other researchers to be able to develop more in-depth research in a broader scope.

CHAPTER V
CLOSING

A. Conclusion

From the results and discussion of the research analysis that has been carried out, it can be concluded that:

1. The level of suitability of Physics material in E-Book Edupark Sarasah Kajai Waterfall based on ATP formulated in the first semester of class XI, namely ATP 11.1 is categorized as “not suitable”, ATP 11.2 is categorized as “suitable”, ATP 11.3 is categorized as “quite suitable”, ATP 11.4 is categorized as “very suitable”, and ATP 11.5 is categorized as “quite suitable”. Meanwhile, in the second semester physics material, ATP ATP 11.7 is categorized as “very suitable” and the other ATPs, namely 11.6, 11.8, 11.9, and 11.10 are categorized as “not suitable” with the physics material of SMA/MA Class XI Merdeka Curriculum.
2. The level of depth of material in the Sarasah Kajai Waterfall Physics Edupark E-book on Work and energy material is categorized as very deep, on static fluid material is categorized as deep, and for dynamic fluid material is categorized as deep.

This shows that the suitability of the material in the Sarasah Kajai Waterfall Physics Edupark E-book is in accordance with the Merdeka curriculum. However, the description of the material in the Sarasah Kajai Waterfall Physics Edupark E-book has not been described based on the content standards of the Merdeka curriculum. Thus, the Sarasah Kajai

Waterfall Physics Edupark E-book cannot be applied as the main book in schools that have implemented the Merdeka curriculum before revision.

B. Suggestions

Based on the research results and conclusions obtained, the researchers put forward the following suggestions:

1. Teachers should need to choose textbooks that have the suitability and depth of material that is in accordance with the learning outcomes with the applicable curriculum and the expected learning objectives.
2. The description of the material in the Sarasah Kajai Waterfall Physics Edupark E-book is not in accordance with the content standards in the Merdeka curriculum, so it is necessary to redesign the Physics Edupark E-book in accordance with the applicable curriculum, namely the Merdeka curriculum.
3. Other researchers, to continue analyzing the suitability and depth of material in other Physics Edupark E-books.

REFERENCES

Amalia, F., & Kustijono, R. (2017). SEMINAR NASIONAL FISIKA (SNF) 2017 Efektifitas penggunaan E-Book dengan Sigil untuk melatihkan kemampuan berpikir kritis. *SEMINAR NASIONAL FISIKA (SNF) "Menghilirkan Penelitian-Penelitian Fisika Dan Pembelajarannya," November*, 81–85.

Anggara, V. J., & Rifai, H. (2019). The Preliminary Analysis of Edupark Learning Vevices of Temperature and Heat Physics of Air Panas Semurup Kerinci District. *Journal of Physics: Conference Series*, *1185*(1). https://doi.org/10.1088/1742-6596/1185/1/012095

Arni Yunita, R. (2023). The Practicality of Integrated High School Physics Edupark Ebook Sarasah Kajai Waterfall Destinations with a Scientific Approach to the Industrial Revolution 4.0. *Jurnal Penelitian Pembelajaran Fisika (JPPF)*, *9*, 86–93. https://doi.org/10.24036.121455

Arni Yunita, R., & Rifai, H. (2023). The Practicality of Integrated High School Physics Edupark Ebook Sarasah Kajai Waterfall Destinations with a Scientific Approach to the Industrial Revolution 4.0. *Jurnal Penelitian Pembelajaran Fisika*, *9*, 2023.

Asri, N. (2018). Dimensi Pengetahuan Dan Tingkat Berpikir Pada Pembelajaran Kimia. *Jurnal Ilmiah Kanderang Tingang*, *9*(2), 103–113. https://chem-upr.education/ojs/index.php/JIKT/article/view/10

Azwar, S. (2021). *Reliabilitas dan Validitas* (4th ed.). Pustaka Pelajar.

Eka Erlinawati, C., & Bektiarso, S. (2019). Model Pembelajaran Project Based Learning Berbasis STEM pada Pembelajaran Fisika. *Seminar Nasional Pendidikan Fisika*, *4*(1), 2527–5917. http://dx.doi.org/10.36764/jc.v1i02.81

Elisa. (2018). Pengertian, Peranan, dan Fungsi Kurikulum. *Jurnal Teknologi*, *1*(1), 69–73. https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/MT_Globalization_Report_2018.pdf%0Ahttp://eprints.lse.ac.uk/43447/1/India_globalisation%2C society and inequalities%28lsero%29.pdf%0Ahttps://www.quora.com/What-is-the

Endriani, D. (2015). *Penerapan Kurikulum Berbasis KKNI dan Permenpan Rb untuk Meningkatkan Mutu dan Daya Saing Mahasiswa Pendidikan Kepelatihan Olahraga Fik Unimed*. 85–96.

Farisi, M. imam. (2012). Buku Teks Sebagai Psychological Tool Proses Enkulturasi Dan Pelestarian Lokal. *Prosiding Temu Ilmiah Nasional Guru IV. Universitas Terbuka.*, 598.

Firdaus, A., Samhati, S., & Suyanto, E. (2014). Analisis Kelayakan Isi Buku Teks

Bahasa Indonesia Terbitan Erlangga Kelas VII SMP/MTs. *Jurnal Kata (Bahasa, Sastra, Dan Pembelajarannya)*, *1*, 1–12.

Fitriyah, C. Z., Wardani, R. P., Studi, P., Guru, P., Dasar, S., & Jember, U. (2022). Paradigma Kurikulum Merdeka Bagi Guru Sekolah Dasar. *Jurnal Pendidikan Dan Kebudayaan, (2022) 12 236-243, Vol. 12 No*.

Gotriansyah, K. (2021). Analisis Buku Tematik Siswa Muatan IPA Ditinjau Dari Dimensi Pengetahuan Faktual, Konseptual, Prosedural dan Metakognisi (Studi Deskriptif Materi IPA Tema 6 Dan 7 Kelas VI SD) Endang Widi Winarni. *Juridikdas Jurnal Riset Pendidikan Dasar*, *4*(3), 349–362.

Hamalik. (2007). *Dasar-dasar Pengembangan Kurikulum*. Mandar Maju.

Hidayat. (2017). *Pengembangan Buku Elektronik Interaktif pada Materi Fisika Kuantum Kelas XII SMA.*

Juhrodin, U. (2023). *Taksonomi Anderson* (L. W. Anderson, D. R. Krathwohl, P. W. Airasian, K. A. Cruikhshank, R. E. Mayer, P. R. Pintrich, J. Raths, & M. C. Wittrock (eds.)). Jim-Zam Co.

Kemendikbud. (2022). *Tanya Jawab Kurikulum Merdeka*. Kemendikbud.

Lestari, N. V., & Rifai, H. (2020). Preliminary analysis of Bukik Chinangkiek edupark's potential as a learning resource for physics in senior high school at X Koto Singkarak Solok, Indonesia. *Journal of Physics: Conference Series*, *1481*(1). https://doi.org/10.1088/1742-6596/1481/1/012049

Muslich, M. (2010). *Teks Book Writing: Dasar- Dasar Pemahaman, Penulisan, dan Pemakaian Buku Teks.* Ar-Ruzz Media.

Nanda, A. S. S. (2022). Analisis Kelayakan Isi Buku Teks Bahasa Indonesia Terbitan Erlangga Kelas Ix Smp/ Mts Semester I. *Didaktik : Jurnal Ilmiah PGSD STKIP Subang*, *8*(2), 1122–1130. https://doi.org/10.36989/didaktik.v8i2.381

Novika Pertiwi, F. (2021). Dimensi Pengetahuan FKPM (Faktual, Konseptual, Prosedural, dan Metakognitif) Mahasiswa IPA pada Pembelajaran Mekanika. *Ibriez : Jurnal Kependidikan Dasar Islam Berbasis Sains*, *6*. https://doi.org/10.21154/ibriez.v6i1.146

Oktia Elvisa, G. (2021). Praktikalitas E-book Edupark IPA dengan Pendekatan Saintifik Berdasarkan Destinasi Wisata Pantai Padang. In *Jurnal Penelitian dan Pembelajaran Fisika* (Vol. 7, Issue 2).

Perwita, D. P., & Fauzi, A. (2021). The analysis of depth high school physics material in terms of standars for the development of earthquake theme physics e-books. *Journal of Physics: Conference Series*, *1876*(1). https://doi.org/10.1088/1742-6596/1876/1/012037

Pratycia, A., Dharma Putra, A., Salsabila, A. G. M., Adha, F. I., & Fuadin, A. (2023). Analisis Perbedaan Kurikulum 2013 dengan Kurikulum Merdeka. *Jurnal Pendidikan Sains Dan Komputer*, *3*(01), 58–64. https://doi.org/10.47709/jpsk.v3i01.1974

Ramadhani, P. R., Akmam, Desnita, & Darvina, Y. (2019). Analisis Keterampilan Proses Sains pada Buku Teks Pelajaran Fisika SMA Kelas Xi Semester 1. *Pillar of Physics Education*, *12*(4), 649–656.

Rifai, H. (2019). Pengintegrasian Wahana Permainan Wisata Alam Ngarai Sianok dan Wisata Buatan MiFan Water Park Padang Panjang ke dalam Materi Fisika. *Jurnal Eksakta Pendidikan (JEP)*, *3*(November). https://doi.org/https://doi.org/10.24036/jep/vol3-iss1/400 Pengintegrasian

Sapitri, L. (2022). Studi Literatur terhadap Kurikulum yang Berlaku di Indonesia saat Pandemi COVID-19. *Inovasi Kurikulum*, *19*(2), 227–238. https://doi.org/10.17509/jik.v19i2.44229

Saprudin, D. (2021). analisis penggunaan e-book dalam pembelajaran fisika. *Jurnal Imiah Multi Sciences*, 20–26.

Sari, D. P., & Rifai, H. (2019). Preliminary Analysis of Edupark Fluid Learning Tool in Mifan Water Park in Padang Panjang City. *Journal of Physics: Conference Series*, *1185*(1). https://doi.org/10.1088/1742-6596/1185/1/012091

Sasma, N., Fauzi, A., Si, M., Sarjana, M., Fmipa, P. F., Pengajar, S., Fmipa, J. F., & Penulis, K. (2020). Analisis Kesesuaian Materi Fisika SMA dengan Materi Gempa Bumi. In *Physics Education* (Vol. 13, Issue 1).

Sugiyono. (2017a). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. CV. Alfabeta.

Sugiyono. (2017b). *metode penelitian kuantitatif, kualitatif dan R&D.* Alfabeta.

Taqwa, M. R. A., Utami, Y. A., & Rivaldo. (2019). Pengembangan Buku Siswa Elektronik Berbasis Android pada Materi Suhu dan Kalor untuk Persiapan Ujian Nasional SMA/MA. *Jurnal Riset Dan Konseptual*, *4*, 225–234.

Tiara Wulandari, A., Fauzi, A., & Darvina, Y. (2019). Analisis Kesesuaian Materi Fisika untuk Diintegrasikan dengan Materi Tsunami pada Buku Teks Pelajaran Fisika SMA/MA. *Physics Education*, *12*(3), 449–456.

Ummah, K., & Rifai, H. (2020). Preliminary Analysis Learning Media Based on Edupark Science With Scientific Methods in the National Geopark of Ranah Minang Silokek of Sijunjung. *Journal of Physics: Conference Series*, *1481*(1). https://doi.org/10.1088/1742-6596/1481/1/012065

Wahyuni, L., & Rahayu, Y. S. (2021). Development Of Project-Based Learning

(PjBL) Based E-Book to Train Creative Thinking Skill in Plant Growth and Development Topic of 12 th Grade in Senior High School Luspita Wahyuni Yuni Sri Rahayu. *Tahun*, *10*(2), 314–325. https://ejournal.unesa.ac.id/index.php/bioedu

Wardani, O. P. (2018). Analisis Kelayakan Isi dan Bahasa pada Buku Teks SMA Bahasa Indonesia Ekspresi Diri dan Akademik Kelas X SMA. *Jurnal Pendidikan Bahasa Indonesia*, *5*(2), 75. https://doi.org/10.30659/j.v5i2.2352

Yulia Sari, S., Darvina, Y., Satria Dewi, W., Pengajar Jurusan Fisika, S., & Universitas Negeri Padang, F. (2020). Analisis Ketersediaan Hots pada Lembar Kerja Siswa Fisika Kelas XI Semester 1 di Sumatera Barat. *Physics Education (2020) 387-394*, *13*(3), 387–394.

Yunita, A. R., & Rifai, H. (2022). *E-book Edupark Fisika Air Terjun Sarasah Kajai*. Universitas Negeri Padang.