

p-ISSN : 2303 - 355X I e-ISSN : 2685 - 2217 PUBLISHED BY : LPPM of UNIVERSITAS LABUHANBATU



Jurnal Eduscience (JES)

Volume 10, No. 3 Tahun 2023

Submit: 28 Oktober 2023

Accepted: 2 Desember

2023

DEVELOPMENT OF SMARTBOOK LEARNING MEDIA FICTIONAL STORY MATERIAL BASED ON EAST JAVA FOLK STORIES

JOHANES VICTORY KRISTIANTO¹, ABDUL AZIZ HUNAIFI², NOVI NITYA SANTI³

^{1,2,3}Elementary School Teacher Education Study Program, Universitas Nusantara PGRI Kediri, Indonesia

Email: Johanesv60@gmail.com, hunaifi@unpkdr.ac.id, novinitya@gmail.com

Abstract

This research is motivated by teachers still using the teacher center method so that learning is monotonous and the learning media is less interesting. Apart from that, it is not effective because students are less enthusiastic about learning so that learning outcomes are not satisfactory. This research has an urgency, namely to make learning interesting, innovative and make students have more motivation and enthusiasm for learning. The solution to overcome the problem is to develop learning media, namely smartbooks. The aims of the research are: (1) to determine the validity of smartbook learning media, (2) to determine the practicality of smartbook learning media, (3) to determine the effectiveness of smartbook learning media. This research is a type of development research (R&D) using a 4D development model through stages: (Define), (Design), (Development), and (Disseminate). The define stage is used to analyze and find out needs in the school. The design stage is to determine and design the product being developed. The development stage of the final product is different from other products. The disseminate stage is used for the product dissemination process through validation. The conclusion of this research: smartbook learning media is said to be very valid with a percentage of 86%. The results of the learning media teacher responses were said to be very practical with a percentage of 94%. Smartbook learning media is said to be very effective because after limited trials it got a percentage of 91% and extensive trials got 88%.

Keywords: Smartbook Learning Media; fictional stories; East Javanese folklore.

Abstrak

Penelitian ini dilatarbelakangi oleh guru masih menggunakan metode teacher center sehingga pembelajaran monoton dan media pembelajaran kurang menarik. Selain itu tidak efektif karena siswa kurang bersemangat belajar sehingga hasil belajar belum memuaskan. Penelitian ini memiliki urgensi yaitu guna membuat pembelajaran menjadi menarik, inovatif dan membuat siswa memiliki motivasi serta semangat belajar yang lebih. Adapun solusi untuk mengatasi permasalahan ialah mengembangkan media pembelajaran yaitu smartbook. Tujuan dari penelitian ialah: (1) untuk mengetahui kevalidan media pembelajaran smartbook, (2) untuk mengetahui kepraktisan media pembelajaran smartbook, (3) untuk mengetahui keefektifan media pembelajaran smartbook. Penelitian ini termasuk jenis penelitian pengembangan (R&D) menggunakan model pengembangan 4D melalui tahapan: (Define), (Design), (Development), dan (Disseminate). Tahap define digunakan menganalisis dan mencari tahu kebutuhan di sekolah. Tahap design guna menentukan dan merancang produk yang dikembangkan. Tahap Development hasil final produk berbeda dengan produk lain. Tahap disseminate digunakan guna proses penyebaran produk melalui validasi. Kesimpulan penelitian ini: media pembelajaran smartbook dikatakan sangat



p-ISSN: 2303 - 355X I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU



valid dengan presentase sebesar 86 %. Hasil dari respon guru media pembelajaran dikatakan sangat praktis dengan presentase sebesar 94%. Media pembelajaran *smartbook* dikatakan sangat efektif sebab setelah uji coba terbatas mendapatkan presentase sebesar 91% dan suji coba luas mendapatkan 88%.

Kata Kunci: Media Pembelajaran smartbook: cerita fiksi: cerita rakyat Jawa Timur .

INTRODUCTION

Indonesian language learning in elementary schools is learning that emphasizes things or aspects of language use to improve students' skills or abilities in terms of communication, both verbally and in writing. According to (Susanto, 2018) "Learning in elementary schools cannot be separated from the 4 aspects of language including listening, speaking, reading and writing." According to (Siregar; et al., 2018) "Indonesian language learning in elementary schools is learning that emphasizes things or aspects of language use to improve students' skills or abilities in terms of communication, both verbally and in writing." Meanwhile, according to (Ali, 2020), learning Indonesian is expected to be able to enable every student to communicate well so that students can use and understand every aspect of Indonesian properly and correctly.

Based on the description of expert opinions, it can be concluded that learning Indonesian emphasizes the correct use of language which includes listening, speaking, reading and writing. These four things in sequence are very important for humans to be able to speak. Because humans carry out interaction and communication activities with each other in everyday life, either verbally or in writing.

The aim of learning Indonesian in grade 4 elementary school is expected to cover four competencies, namely: (1) Religious attitude competency, where students must be able to accept, implement and respect the teachings of their respective beliefs. (2) Social attitude competency, where students must be able to display honest, responsible, obedient and caring behavior towards others. (3) Knowledge competency, where students must be able to understand various knowledge in fact through observation or asking about curiosity about themselves, God's creatures and the objects they encounter around them. (4) Skills competency, where students must be able to present what they have observed and asked questions in the form of clear language, systematic structure using aesthetic work (Safitri et al., 2019, 2023; Syahputra & Safitri, 2022).



JES

p-ISSN: 2303 - 355X I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU

In Indonesian language learning materials in elementary schools there is fictional story material. The material for fictional stories is contained in basic competency (KD) 3.9, namely paying attention to the characters in fictional texts. The indicators for this material are 3.9.1 Mention the types of fiction stories. 3.9.2 Distinguish between one type of fictional story, namely folklore. According to (Nurgiyantoro, 2018) The content of fictional stories tells about problems in various aspects of life. Meanwhile, according to (Mulyadi, 2017) "Revealing the essence of fictional stories is one part of the literary genre, which contains a person's imagination and is useful for entertaining. Based on the experts' descriptions, it is concluded that fictional stories basically aim to entertain the reader, increase insight, knowledge and also train the reader to be able to imagine. Apart from that, fictional stories are useful in providing a source of entertainment for readers and can also increase curiosity.

The urgency of this research is to make learning interesting, innovative and make students have more motivation and enthusiasm for learning. Ideally, learning about fiction stories should be as interesting as possible, not just monotonously explained by the teacher. Choosing appropriate and innovative learning methods or techniques will make learning less monotonous. In accordance with the opinion of (Sumardi, 2020) "Learning will be interesting and easy to understand if the learning activities are presented or use learning media in concrete or real forms, make sense, are interesting, suit the level of life of elementary school students and students are able to use them." Meanwhile, according to (Kristanto, 2016) learning will be interesting if you use learning media which functions to make learning activities interesting and innovative; learning activities are more lively and interactive. Based on the description above, it can be concluded that selecting and using learning media that is appropriate and appropriate to the material will help make learning interesting. Basically, learning media is very important to use in supporting learning activities, especially when the media used is concrete media.

Based on the results of observations in the Indonesian language learning process in class 4 at SDN Ngadi, the fiction story material is not yet effective. This is caused by teachers not being optimal in conveying and teaching fictional story material. Teachers still use lecture or teacher center methods so that learning seems monotonous and less interesting. The learning media he uses are in the form of concrete media but are not yet interesting, they are limited to books containing fictional stories but not equipped with interesting pictures. Students' learning motivation and



p-ISSN: 2303 - 355X I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU



enthusiasm are also still low. This condition ultimately makes the grades obtained by students also unsatisfactory. This is proven by the average score obtained by class IV students at SDN Ngadi in Indonesian language lessons on fiction story material which is still relatively low where the average score is below the KKM score of 78.

The solution to overcome the description of existing problems is that this research develops smartbook learning media with fiction story material for 4th grade elementary school students. In the opinion of (Daryanto, 2018) "smartbooks are a type of teaching material that is arranged systematically, where the book contains a set of learning material tools that are designed to be as attractive as possible to help students learn to understand and master the learning material." According to (Nurgiyantoro, 2018) "Smartbook media is a form of media that is suitable for elementary school students, where the smartbook contains pictures that make students interested and enthusiastic about learning. Meanwhile, according to (Utomo; & et al, 2018) the advantage of smartbook media is that the material is packaged in the form of text, illustrations and pictures presented attractively, easy to carry anywhere. Based on the description above, it can be concluded that the smartbook learning media will display attractive images and colors to stimulate elementary school students to have more enthusiasm and motivation to learn.

Previous research relevant to this research was carried out by, (Umyati et al., 2021) entitled "Development of Trilingual Smart Book Media as a Literacy Means for Reading and Writing for Class III Elementary School Students". Based on the results of the data analysis that has been carried out, it shows that the quality of the trilingual smart book that has been developed can be said to be in the very decent category with a percentage of calculations from media experts of 91%, then material experts getting a percentage of 92%, and results from language experts getting a percentage of 80. %. Meanwhile, the response from students after testing the trilingual smart book with 10 respondents, namely 96%, was considered very good. Therefore, it can be concluded that trilingual smart books are suitable for use as a media for reading and writing literacy for third grade elementary school students.

The two relevant studies were conducted by, (Krisdiana, Iriyanto & Astuti, 2021) with the title "Development of Smart Book Learning Media to Support the Learning Activities of Children Aged 5-6 Years". Shows that the results of the data analysis on the development of smart book media have very feasible validity/feasibility criteria with a percentage of 91.11%, the



JES

p-ISSN: 2303 - 355X I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU

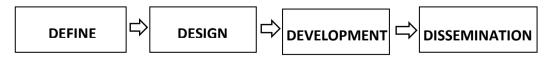
effectiveness criteria are very effective with a percentage of 91.66%, the efficiency criteria show a percentage of 88.88% which is said to be very efficient, while the attractiveness shows a percentage of 92.77% is said to be very interesting. Therefore, it is concluded that smartbook learning media is very valid for supporting the learning activities of children aged 5 - 6 years.

The novelty of this research compared to previous research is that the smartbook learning media developed has a barcode that can access the learning media via a cellphone/PC which is animated like playing a game. So students read fiction stories as if they were playing games. Apart from that, the stories presented contain East Javanese folklore. With this newness, this research was carried out so that learning becomes more interesting and not monotonous. So that students have more motivation and enthusiasm to learn. According to (Sumardi, 2020) "Learning will be interesting and easy to understand if the learning activities are presented or use learning media in concrete or real forms, make sense, and are interesting.

Based on the description that has been given, the aim is to develop smartbook learning media to increase student motivation and enthusiasm for learning. It is hoped that in the world of education in the future this research can be used as a reference to create more innovative and interesting technology-based learning media so that students can be motivated and enthusiastic about learning.

RESEARCH METHODS

The type of research used in this research is development or (R&D) because it will create a product. (Aswar & et al;, 2018) stated that, "Research and development is a theory that is structured to produce a product and validate it which will be used in education. Development was carried out guided by 4D design. The 4D development model has four stages. According to (Widiyasari et al., 2020) the development stages in Thiagarajan's 4D (Four D) model include: Define, Design, Development, Disseminate.



(Widiyasari et al., 2020)



p-ISSN: 2303 - 355X I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU



This define stage defines various problems before determining the product that the researcher will develop. This stage includes: conducting observations, interviews to find out the conditions and problems that exist at SDN Ngadi. Then carry out an analysis of the characteristics of elementary school students, where students are busy in class, not interested in participating in learning activities and low student learning outcomes due to students' lack of interest in reading. The final stage is analyzing what material is the main problem as a basis for product development.

The design stage is the stage of the media selection process or determining what media will be developed. In this research, smartbook media was chosen as the basis for developing fictional story material. After determining the media used, the next step is to determine what software will be used to create the smartbook media, background, font type and images that will be used.

The development stage is the development process of the smartbook media that has been created and developed with a different appearance. Where in this media the content of the story is specifically only folklore from the East Java region. In this media there is a barcode containing an ebook, for students to access after learning activities. Apart from that, the innovation made in this media is that this media is not just a printed book but will be made into an application so that it can be opened on an Android or PC.

The disseminate stage is the spreading stage. The stages of this activity include: First, validating the material and learning media experts. Second, carry out product trials that are developed in 2 stages, namely limited scale trials and wide scale trials.

Data collection instruments were obtained through observation, transportation, evaluation tests and documentation. Observations are carried out to find out problems that occur in schools by observing learning activities. According to (Sugiyono, 2019) Observation is a way of collecting data directly by observing what is in the field. Then using a questionnaire, the questionnaire used was a validation sheet from media experts, material experts as well as teacher and student response questionnaires. According to (Sekaran; et al., 2018) a questionnaire is a collection of written questions that have been created containing an assessment and then answered by the respondent. The broad evaluation test used is an evaluation question given to students regarding fiction story material. According to (Sudijono, 2019) it is a technique or way to measure and assess



JES

p-ISSN : 2303 - 355X I e-ISSN : 2685 - 2217 PUBLISHED BY : LPPM of UNIVERSITAS LABUHANBATU

students' abilities, in the form of giving questions or questions to work on. Documentation aims to take pictures as research evidence.

Meanwhile, the data analysis technique is testing the validity, practicality and effectiveness of smartbook learning media. The data obtained is quantitative data which is analyzed using Likert scale analysis with the following formula.

$$Validasi\ Ahli = \frac{TSe}{TSh} \times 100\%$$
 (Riduwan, 2018)

The results of the validity analysis are interpreted according to the validity value criteria according to (Riduwan, 2018), as follows.

Table 1. Validity Criteria

Percentage	Validity Category	Information
86% - 100%	Very valid	Very good to use
71% - 85%	Valid	May be used after minor revision
56% - 70%	Quite valid	May be used after major revision
41% - 55%	Less valid	Must not be used
25% - 40%	invalid	Must not be used

Data analysis of effectiveness is measured by looking at student learning outcomes with the following formula:

$$p = \frac{l}{n} \times 100\% \quad \text{(Riduwan, 2018)}$$

The results of the effectiveness analysis are interpreted according to the assessment criteria according to (Riduwan, 2018), as follows.

Table 2. Effectiveness Criteria

Completion Percentage	Classification
P > 80%	Very Good
$60\% \le p \le 80\%$	Good
$40\% \le p \le 60\%$	Currently
$20\% \le p \le 40\%$	Bad
P ≤ 20%	Very Bad

Analysis of practicality data through teacher and student response questionnaires using the following formula:



JES

p-ISSN: 2303 - 355X | I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU

$$Presentase = \frac{TSe}{TSh} \times 100\%$$

The results of the practicality analysis are interpreted according to the practicality criteria according to (Riduwan, 2018) the following:

Table 3. Practicality Criteria

Score Interval (%)	Information	
81% - 100%	Very Good	
61% - 80%	\mathbf{Good}	
41% - 60%	Currently	
21% - 40%	Bad	
0% - 20%	Very Bad	

RESULTS AND DISCUSSION

The results of this research can be known through the 4D model development stages, with the Define, Design, Development, Dissemination stages. The following are the results of the discussion of this research.

The define stage includes observation activities to find out the conditions and problems that exist at SDN Ngadi. The problem at Ngadi Elementary School is that learning Indonesian with fiction story material has not been effective. This is caused by teachers not being optimal in conveying and teaching fictional story material. Teachers still use lecture or teacher center methods so that learning seems monotonous and less interesting. The learning media he uses are in the form of concrete media but are not yet interesting, they are limited to books containing fictional stories but not equipped with interesting pictures. Student motivation and enthusiasm for learning are also still low. This condition ultimately makes the grades obtained by students also unsatisfactory.

The design stage includes activities: The process of selecting media or determining what media will be developed. In this research, smartbook media was chosen as the basis for developing fictional story material. After determining the media used, the next step is to determine what software will be used to create the smartbook media, background, font type and images that will be used.



JES

p-ISSN: 2303 - 355X I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU





Image 1. Front and Back Cover View



Image 2. Foreword and Instuctions



Image 3. List of Contents

Next is the development stage, this stage is the final result of the smartbook media that has been created and developed with a different appearance. Where in this media the content of the story is specifically only folklore from the East Java region. In this media there is a barcode containing an ebook, for students to access after learning activities. Apart from that, the innovation made in this media is that this media is not only a printed book but will be made into an application so that it can be opened on Android or PC.



JES

p-ISSN: 2303 - 355X I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU



Image 4. Lembu and Keong Mas Story



Image 5. Author Profile

Next, the last stage, namely disseminate, is the spreading stage. The stages of this activity include: First, validating the material and learning media experts to determine the validity of the smartbook learning media. The media expert validation stage was validated by Dr. Dhian Dwi Nur Wendha, M.Pd. and material expert validation was carried out by expert Encil Puspitoningrum, M.Pd.

The following are the media validation results and material validation results which are depicted in the table below.

Table 4. Expert Validation Results

No	ValidationAspect	Precentage	Validity	
1	Ahli media	86%	VeryValid	
2	Ahli materi	85 %	Very valid	
Rata	a – rata	85,5 %	Very valid	



JES

p-ISSN: 2303 - 355X I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU

Based on the validation results, the percentage of validity of the smartbook learning media was 86% from media experts and 85% from material experts, getting an average validity result of 85.5%. Therefore, it can be said that smartbook learning media is very valid.

Second, a product trial was carried out to determine the effectiveness of the smartbook learning media in 2 stages, namely a limited scale trial and a wide scale trial. This product trial was carried out using a technique or method: students read the smartbook learning media that had been distributed and then worked on evaluation questions. The results of the day of evaluation questions are used as the basis for effectiveness testing. In the limited trial using 7 subjects from grade 4 students at SDN Ngadi, the average result score for evaluation questions was 91. Meanwhile, in the extensive trial using 18 grade 4 students at SDN Ngadi, the average score for evaluation questions was 88. Following are the results of the evaluation question scores. limited and extensive trials.

Table 5. Effectiveness Results

Test Results	KKM	Value of Evaluation Results	Information
Terbatas	78	91	Tuntas
Luas	78	88	Tuntas

Based on the results of product trials, it was found that the percentage of effectiveness of smartbook learning media was 91% from limited trials and 88% from extensive trials. Therefore, it can be said that smartbook learning media is very effective in learning activities.

Third, namely analyzing teacher and student responses after using smartbook learning media to determine the practicality of smartbook learning media. The following are the results of teacher and student responses.

Table 6. Practical Results

Respons Results	Total Score	Maksimum Score	Score Percentage	Information
Guru	52	55	94 %	Very Good
Siswa (Terbatas)	60	70	86 %	Very Good
Siswa (Luas)	164	200	82 %	\mathbf{Good}

Based on the results of the assessment of teacher and student responses, it was found that the practicality percentage was 94% for teachers and 86% for limited trial students, and 82% for wide trial students. Therefore, it can be said that smartbook learning media is very practical to use in learning activities.



JES

p-ISSN: 2303 - 355X | I e-ISSN: 2685 - 2217 PUBLISHED BY: LPPM of UNIVERSITAS LABUHANBATU

Based on this description, the smartbook learning media developed has a novelty, namely that there is a barcode that can access the learning media via a cellphone/PC which is animated like playing a game. So students read fiction stories as if they were playing games. Apart from that, the stories presented contain East Javanese folklore. With this novelty, this research can solve existing problems, making learning more interesting and not monotonous. So that students have more motivation and enthusiasm to learn. According to (Sumardi, 2020) "Learning will be interesting and easy to understand if the learning activities are presented or use learning media in concrete or real forms, make sense, and are interesting.

As for the impact on the world of education in the future, this research can be used as a reference for creating more innovative and interesting technology-based learning media so that students can be motivated and enthusiastic about learning. According to (Kristanto, 2016) along with the development of technology-based learning media, it will have an impact on advancing education.

CONCLUSION

The results of the research on the development of smartbook learning media with fictional story material based on East Javanese folklore, among others: Smartbook learning media is said to be very valid, getting a percentage of 86% from media experts and 85% from material experts. The results of the teacher's responses obtained a percentage of 94% and 82% limited trials, 86% extensive trials. Therefore, it can be said that smartbook learning media is very practical to use in learning activities. The smartbook learning media is said to be very effective, because after a limited trial it got a percentage of 91% and a wide trial of 88%. Based on these results, smartbook learning media can be used as a solution to overcome existing problems.

REFERENCES

Ali, M. (2020). Pembelajaran Bahasa Indonesia dan Sastra (BASASTRA) di Sekolah Dasar. *PERNIK Jurnal PAUD*, 3(1), 35–44. DOI: https://doi.org/10.31851/pernik.v3i2.4839.

Aswar, A., & Dkk; (2018). Metodologi Penelitian. Gunadarma IImu.

Daryanto. (2018). Media Pembelajaran. Gava Media.

Krisdiana, Iriyanto, T., & Astuti, W. (2021). Pengembangan Media Pembelajaran Smartbook untuk Menunjang Aktivitas Belajar Anak Usia 5-6 tahun. *Jurnal Program Studi PGRA*, 7(1), 123–144. DOI: https://doi.org/10.29062/seling.v7i2.329



p-ISSN : 2303 - 355X I e-ISSN : 2685 - 2217 PUBLISHED BY : LPPM of UNIVERSITAS LABUHANBATU



- Kristanto, A. (2016). Media Pembelajaran. Bintang Surabaya.
- Mulyadi, Y. (2017). Bahasa Indonesia untuk Siswa SMA-MA/SMK- MAK Kelas X. Yrama Widya.
- Nurgiyantoro, B. (2018). Teori Pengkajian Fiksi. UGM Press.
- Riduwan. (2018). Dasar-Dasar Statistika. Alfabeta.
- Sekaran;, Uma;, & Bougie; (2018). Metode Penelitian untuk Bisnis: Pendekatan Pengembangan Keahlian, Edisi 6, Buku 1, Cetakan Kedua. Salemba Empat.
- Siregar;, Evelin;, & Hartini, N. (2018). Teori Belajar dan Pembelajaran. Ghalia Indonesia.
- Sudijono, A. (2019). Pengantar Evaluasi Pendidikan. Rajawali Press.
- Sugiyono. (2019). Metode Penelitian Kuantitatif dan Kualitatif dan R&D. Alfabeta.
- Sumardi. (2020). Teknik Pengukuran dan Penilaian Hasil Belajar. CV. Budi Utama.
- Susanto, A. (2018). Teori Belajar dan Pembelajaran di Sekolah Dasar. Kencana Prenadamedia Group.
- Umyati, R., Rosidin, O., & Yuliana, R. (2021). Pengembangan Media Buku Pintar Trilingual sebagai Sarana Literasi Baca Tulis Siswa Kelas III Sekolah Dasar. *Dasar Primary: Jurnal Pendidikan Guru Sekolah*, 10(5), 1091–1103. DOI: http://dx.doi.org/10.33578/jpfkip.v10i5.8294.
- Utomo;, & dkk. (2018). Media Pembelajaran Aktif. Nuansa Cendekia.
- Widiyasari, R., Irawan, V., & Astriyan, A. (2020). Pengembangan Perangkat Pembelajaran Matematika Dengan Bantuan Media Evaluasi Thatquiz. FIBONACCI: Jurnal Pendidikan Matematika, 6(2), 141–154. DOI: https://dx.doi.org/10.24853/fbc.6.2.141-154.
- Riduwan. (2018). Dasar-Dasar Statistika. Alfabeta.
- Safitri, I., Hansyah, P., & Siregar, D. A. (2023). Implementasi Media Pembelajaran Video Animasi IPA Berbasis Karakter Melalui Analogy Learning. IKA BINA EN PABOLO: PENGABDIAN KEPADA MASYARAKAT, 3(1), 42–51. https://doi.org/doi.org/10.36987/ikabinaenpabolo.v3i1.3922
- Safitri, I., Pasaribu, R., Simamora, S. S., & Lubis, K. (2019). The effectiveness of android application as a student aid tool in understanding physics project assignments. *Jurnal Pendidikan IPA Indonesia*. https://doi.org/10.15294/jpii.v8i4.19433
- Syahputra, A., Harahap, RD & Safitri, I. (2022). An Analysis of Student Learning Challenges in Elementary School Science Subject. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, 8(1), 237–247. https://doi.org/https://doi.org/10.33394/jk.v8i1.4508
- Widiyasari, R., Irawan, V., & Astriyan, A. (2020). Pengembangan Perangkat Pembelajaran Matematika Dengan Bantuan Media Evaluasi Thatquiz. FIBONACCI: Jurnal Pendidikan Matematika, 6(2), 141–154.