Development Of Learning Media Assisted By Capcut Theme 2 Subtema 1 Learning 6 In Class II Elementary School

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ABSTRACT

Abstract: The purpose of this study is to develop capcut-assisted learning media on theme 2 sub-theme 1 learning 6 in grade II elementary school that is valid, practical, interesting and effective. Valid according to material expert (Dra. Widayati M.H), media expert (Ferril Irham Muzaki S.Pd., M.Pd) and user/teacher (Luluk Muthori'ah, S.Pd) while practical, interesting and effective according to grade II students SDN Kauman 2 Blitar City. The research method uses R&D development according to Borg & Gall. The stages in this research include: 1) potential and problems, 2) data collection, 3) product design, 4) product validation, 5) product revision, 6) product trial, 7) product revision, 8) usage trial 9) product revision. The data collection instruments used were interview guidelines, validation instruments, and student questionnaires. The type of data in the form of quantitative data is obtained from the results of the material validator questionnaire, media, users/teachers, and students. Qualitative data obtained from suggestions and input from experts, users and students. The validator analysis technique uses a Likert Scale. While the data obtained from product trials and usage trials using the Guttman scale. The results of material validation are 100% (very valid), media validation is 93.75% (very valid), user validation is 100% (very valid), and product testing is 98.8% (very practical/interesting). So it can be concluded that the capcut-assisted learning media is stated to be very valid, practical, interesting and effective to use in learning theme 2 sub-theme 1 learning 6.

Abstrak: Tujuan pada penelitian ini mengembangkan media pembelajaran berbantuan capcut pada tema 2 subtema 1 pembelajaran 6 di kelas II sekolah dasar yang valid, praktis, menarik dan efektif. Valid menurut ahli materi (Dra. Widayati M.H), ahli media (Ferril Irham Muzaki S.Pd., M.Pd) dan pengguna/guru (Luluk Muthori'ah, S.Pd) sedangkan praktis, menarik dan efektif menurut siswa kelas II SDN Kauman 2 Kota Blitar. Metode penelitian menggunakan pengembangan R&D menurut Borg & Gall. Tahapan dalam penelitian ini meliputi: 1) potensi dan masalah, 2) pengumpulan data, 3) desain produk, 4) validasi produk, 5) revisi produk, 6) uji coba produk, 7) revisi produk, 8) uji coba pemakaian 9) revisi produk. Instrumen pengumpul data yang digunakan berupa pedoman wawancara, instrumen validasi, dan angket siswa. Jenis data berupa data kuantitatif diperoleh dari hasil angket validator materi, media, pengguna/guru, dan peserta didik. Data kualitatif diperoleh dari saran dan masukan baik dari ahli, pengguna maupun peserta didik. Teknik analisis validator menggunakan Skala Likert. Sedangkan data yang diperoleh dari uji coba produk dan uji coba pemakaian menggunakan skala Guttman. Hasil validasi materi 100% (sangat valid), validasi media 93,75% (sangat valid), validasi pengguna 100% (sangat valid), dan uji coba produk 98,8% (sangat praktis/menarik). Sehingga dapat disimpulkan media pembelajaran berbantuan *capcut* dinyatakan sangat valid, praktis, menarik dan efektif digunakan dalam pembelajaran tema 2 subtema 1 pembelajaran 6.

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A. BACKGROUND

Education is one of the most important needs for humans. Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional, It is written that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state. Based on opinion Risqy et al., (2021) The existence of Law Number 20 of 2003 strengthens that education is not just conveying knowledge, but education is very important to support character building. In line with opinion Mahanani (2020) that teachers are required to have four competencies, namely professional, personal, social and the best possible learning management.

This corresponds to Permendikbud Nomor 22 Tahun 2016 Tentang Standar Proses Pendidikan Dasar dan Menengah that the implementation of the learning process in schools is carried out in a fun, interactive, motivating, inspiring and challenging way for students to actively participate and provide sufficient space for independent creativity and initiative in accordance with the physical, psychological, interests, and talents of students. Referring to research Martha et al., (2020) learning is an increase in student and teacher learning activities that are supported by learning resources in the learning environment. The learning process should be carried out in a fun and not monotonous way, especially in learning thematic content so that the potential development of students can be achieved optimally.

Based on the results of an interview with the second grade homeroom teacher at SDN Kauman 2, which is located at Jalan Kalibrantas No. 55, Kauman, Kepanjen Kidul District, Blitar City on October 13, 2021. Information was obtained that in the learning process, teachers have used pictures, material summaries and books. thematic. It is undeniable that learning resources can come from various sources (Muzaki, 2017). However, on the other hand, students feel bored when they have to read a text that is too long, and there are some children who cannot understand the reading. The media used so far are pictures and thematic books. Constraints if students do not understand the material can be repeated and remedial. However, if there are other additional media, it would be better if the advice from the class teacher of SDN Kauman 2 Blitar City would be better. The second grade teacher revealed that the interesting media in the form of videos was quite interesting for thematic material for theme 2 sub-theme 1 learning 6. Electronic-based media was indeed easier to use.

The same problem also occurs at SDN Gedog 3 which is located at Jalan Letda Markawi No. 32, Gedog, Sananwetan District, Blitar City and Joresan Elementary School which is on Jalan Madura No. 19, Joresan, Mlarak District, Ponorogo Regency. The results of the second grade homeroom interview found that there were still many students who did not understand the thematics in theme 2 sub-theme 1 learning 6. The media used was still using power point. The learning process looks less active from students and only the teacher plays an active role in the learning process. Thematic books are the only reference for student learning, so students get bored quickly in learning. In addition, the use of limited learning media and the absence of variation in teaching (conventional) is one of the causes of monotonous and less interesting learning. The broad scope of material results in the need for media that supports and facilitates the student learning process, namely in the form of capcut-assisted learning media.

The use of capcut-assisted learning media in the learning process can increase students' interest in learning and eliminate boredom in learning. Previous research by (Wulandari & Hermita, 2022) to strengthen this, where the development of capcut-assisted learning media proved that there were significant differences before and after the use of media to improve learning outcomes. In addition, student learning outcomes can meet the target and satisfactorily so that there is an increase in student learning outcomes and achievement. This statement is corroborated by other studies

(Suryaman & Suryanti, 2022) which revealed that animated video media was effective in improving cognitive learning outcomes of second grade elementary school students.

Based on the explanation of the background above, it can be concluded that in the learning process the use of learning media in the learning process is very important because it is a means to strengthen understanding and make it easier for teachers to deliver the material to be delivered. In addition, to attract students' interest, it is necessary to develop interesting digital-based learning media. Learning media is very important, with the existence of learning media, learning materials that are abstract can become more concrete, so that it will be easy for students to understand (Nurrita, 2018). Therefore, researchers developed learning media assisted by capcut on theme 2 sub-theme 1 learning 6. The purpose of this study was to develop and produce learning media assisted by capcut theme 2 subtheme 1 learning 6 that was valid based on material experts, media experts and teachers (users). as well as practical, interesting and effective for students.

B. RESEARCH METHOD

Capcut-assisted learning media on theme 2 sub-theme 1 learning 6 uses the Research and Development (R&D) research and development model introduced by Borg and Gall in (Amalia, 2020). Other experts also think Nugraheni & Winarni (2018) research and development methods are a series of procedures or stages that are carried out to create certain products and test the effectiveness of these products. Reinforced by opinion Widyawati & Prodjosantoso (2015) revealing that research and development methods are processes for developing new products or improving existing products in a responsible manner.

Stages in research Sugiyono (2016) includes 1) potential and problems, 2) data collection, 3) product design, 4) product validation, 5) product revision, 6) product trial, 7) product revision, 8) usage trial, 9) product revision. The test subjects in this study were 3 students for a limited trial, 25 grade II students at SDN Kauman 2 for field trials, class II teachers at SDN Kauman 2, material experts, and media experts.

The data collection instruments used were interview guidelines, validation instruments, and student questionnaires. Types of data in the form of quantitative descriptive data and qualitative data. Quantitative data obtained from the results of the material validator questionnaire, media, users/teachers, and students. The results of the research data are expressed in the form of a description. Meanwhile, qualitative data were obtained from suggestions and input from experts, users and students. The data analysis technique used for the validator uses Skala Likert. While the data obtained from product trials and usage trials using skala Guttman. The following Skala Likert from (Hamzah, 2020: 98).

RatingTsh	Score
Very good	4
Good	3
Not Good	2
Very Not Good	1

T :1. a

Source : (Hamzah, 2020 : 98)

The data obtained will be accumulated into a total score obtained from material experts, media experts and users. Then, the data is analyzed using the formula of Akbar, (2017: 158) as follows.

$$Vah = \frac{Tse}{Tsh} x100\%$$

Information : Vah = validasi ahli

Tse = total score achieved

Tsh = expected total score

The results of these calculations will obtain a score from expert validation and will then be interpreted in the table as follows.

user 20 cutegorization criteria for		
Achievement level (%)	Category	Test Decision
85,01 - 100,00	Very valid	Can be used without revision
70,01 - 85,00	Quite valid	Usable, but needs minor revision
50,01 - 70,00	Not valid	Can be used with major revisions
10,00 - 50,00	Invalid	Cannot be used

Source : (Akbar, 2017 :155)

The practicality of the data obtained from students using Skala Gutman. Skala Gutman This gives a "yes-no" answer with a score of 1 for "yes" answers and a score of 0 for "no" answers. The results of the questionnaire that already have an assessment will be processed using the formula from the validation which refers to Arikunto, (2010) as follows.

$$\mathbf{P} = \frac{\Sigma x}{N} x 100\%$$

Information :

P = Score percentage

 Σx = Total score

N = Maximum score

The results of these calculations obtained scores from students and can then be interpreted in the following table.

Percentage rate (%)	Category	Test Decision
85,01 - 100,00	Very practical/interesting	Can be used without revision
70,01 - 85,00	Quite practical/interesting	Usable, but needs minor revision
50,01 - 70,00	Not enough practical/attractive	Can be used with major revisions
01,00 - 50,00	Not practical/attractive	Cannot be used

Table 3. Categorization Criteria for Practicality and Product Attractiveness

Source : Akbar (In Irmawati, dkk. 2017)

Based on the criteria in table 3 above, capcut-assisted learning media on theme 2 sub-theme 1 learning 6 can be used if the percentage level of validity can reach more than 70%. If the percentage level is less than or equal to 70%, then the capcut-assisted learning media on theme 2 sub-theme 1 learning 6 still needs to be revised again based on suggestions and input from students.

C. RESULTSA AND DISCUSSION

In the results section, the results of each stage used in research and development activities of capcut-assisted learning media are described on theme 2, sub-theme 1, learning 6. The researcher uses the R&D development research method according to Borg & Gall. The stages in this study used 9 out of 10 steps of the research procedure due to time and cost limitations. The research includes: 1) potential and problems, 2) data collection, 3) product design, 4) product validation, 5) product revision, 6) product trial, 7) product revision, 8) usage trial 9) product revision. The results are described as follows.

1. Potential and problems.

The results of interviews and observations found potential in class II SDN Kauman 2, SDN Joresan and SDN Gedog 3, namely students who have and can operate Android devices and like learning that

uses media and there are learning support facilities such as LCDs, and sound systems. The problem found is the lack of learning media that can be used to support learning activities. Learning media available for learning is only power point. According to the teacher, power point is less varied and less interesting, so students do not like the media. For that we need research and development of learning media products assisted by capcut.

2. Data collection

Data collection is carried out based on potential and problems as well as identification of learning media used in learning activities. The problem of lack of learning media can be overcome by developing capcut-assisted learning media. This is based on the potential of students, namely having and being able to operate Android devices. The results of interviews with teachers, it is known that the material that has little supporting media is theme 2 sub-theme 1 learning 6. Thus, this research and development can be continued to the stage of designing capcut-assisted learning media products.

3. Product Design

The product design stage begins with the steps of designing the product to be made. The media product that will be made is adjusted to the theme 2 sub-theme 1 learning 6. The next activity is to design the product by determining the content contained in the learning media. The product developed in the form of learning media is made in several steps, namely (1) Beginning with making a video about the subject matter of the theme 2 sub-theme 1 learning 6 (2) Opening the cutout and editing the video (3) The image is edited and compiled into a video presentation with application capcut (4) When finished, then save.

4. Product Validation

After the product has been made, then a validation instrument is compiled to assess the validity of the developed learning media product. Learning media assisted by capcut theme 2 sub-theme 1 learning 6 was then validated by 3 experts, namely material expert (Dra. Widyawati. M.H , media expert (Ferril Irham Muzaki S.Pd., M.Pd) and teacher as user (Luluk Muthori'ah , S.Pd). The recapitulation of the validation results from the experts is stated as follows.

	Table 4. Recapitulation of valuation Results			
No	Validation	Validation Value	Category	
1	Material Expert	100%	Very valid	
2	Media Expert	93,75%	Very valid	
3	Teacher	100%	Very valid	
	Average	97,91%	Very valid	

Table 4. Recapitulation of Validation Results

5. Product Revision

Revision of learning media products assisted by capcut theme 2 sub-theme 1 learning 6 was revised based on suggestions and input from experts. The revision is to increase the teacher's voice so that the explanation is clearer.

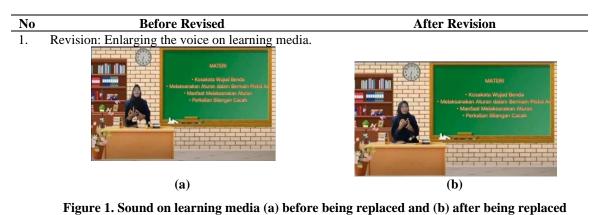


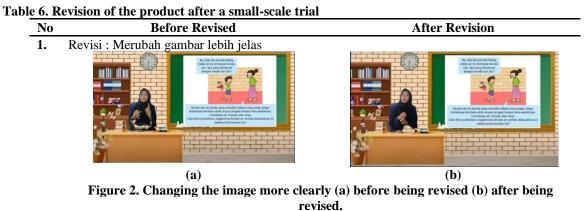
Table 5. Product revision After validation Material experts, media experts, and teachers.

6. Small Scale Trial

The initial trial used class II targets at SDN Kauman 2 Blitar City. The initial trial was carried out by 3 students to obtain data on the results of the attractiveness and practicality of the media, as well as to identify the shortcomings of the product developed before the use trial. At the beginning of learning, students are given instructions regarding the use of learning media. Furthermore, students are given instructions on the use of media through the LCD screen. Learning media can also be opened at the link that has been shared in the class WA group. At the end of the lesson, students were given a student response questionnaire regarding the learning media products being tested. The results of the practicality and attractiveness of the product obtained a percentage of 100% with a very practical category, can be used without revision. Thus, capcut-assisted learning media can be used in the learning process.

7. Product Revision

In the initial trial of learning media, deficiencies were found, so revisions to the product image were not clear.



8. Large-Scale Trial

The implementation of a large-scale trial was carried out with 25 class II students. The data obtained were used to determine the practicality and validity of the developed learning media. The results of the practicality and attractiveness of the product are obtained with a score of 247 out of a maximum total score of 250 with a percentage of 98.8% with a very practical category, can be used without revision. Thus, capcut-assisted learning media can be used in the learning process.

9. Product Revision

The results of the trial of the use of media and student response questionnaires that have been given, it can be seen that students are able to use learning media well. The researcher only arrived at the product revision stage. Mass production was not carried out due to area and cost limitations. Researchers do production only to class teachers. The final results obtained data that the development of capcut-assisted learning media for class II was very valid, practical, interesting and effectively implemented in learning theme 2 sub-theme 1 learning 6.

DISCUSSION

Capcut-assisted learning media products on theme 2 sub-theme 1 learning 6 have gone through the product validation stage to determine the level of product validity. Validation was carried out by material experts (Dra. Widayati M.H), media experts (Ferril Irham Muzaki S.Pd., M.Pd) and teachers (Luluk Muthori'ah, S.Pd) while to determine the level of practicality assessed by students of SDN Kauman 2 Blitar City.

Product Validity Based on Material Experts, Media Experts and Users/Teachers

Material Expert Validation

Material expert validation was carried out on September 11, 2022 by an elementary school teacher education lecturer (Dra. Widayati M.H) to assess the validity of capcut-assisted learning media products on theme 2 sub-theme 1 learning 6 which has 4 aspects of assessment including aspects of material suitability, material coverage, accuracy of writing and presentation of material. In line with opinion Hidayati (2013) that the assessment of the validity of the material consists of 4 aspects of assessment, including material that is in accordance with the curriculum, material coverage, accuracy in writing and coherent presentation of material. Reinforced by opinion Muis (2019) that the assessment aspect of the content includes the suitability of the material with the curriculum, KI – KD, indicators, and learning objectives which are adjusted to the characteristics of the problem in learning. The content of the assessment aspect in the scope of the material is also supported by opinions Sumardi (2020) that the material should be in accordance with the facts and knowledge, the material and the questions should be in accordance with the age level of the students and the learning objectives. This is supported by the opinion Permana (2020) The presentation of interesting material and the use of bright images can make it easier for students to understand the material presented by the teacher.

The results of the material expert validation produce a percentage of 100%, which is based on the validation criteria according to Akbar (2017) the percentage of 100% belongs to the range of 85.01% – 100.00%, this shows that the capcut-assisted learning media product on theme 2 sub-theme 1 learning 6 is included in the very valid category so that the product can be used without revision. Product improvement is still carried out based on suggestions and input from material expert validators, which are good enough so that there are no revisions. Capcut-assisted learning media products on theme 2 sub-theme 1 learning 6 are valid according to material experts and are in accordance with 4 aspects of assessment, namely aspects of material suitability, material coverage, accuracy of writing and presentation of material.

Media Expert Validation

Media expert validation was carried out on September 13, 2022 by media experts (Ferril Irham Muzaki S.Pd., M.Pd) to assess the validity of capcut-assisted learning media products on theme 2 subtheme 1 learning 6 already. The validity of this media has 4 aspects of assessment, including product display, learning media, product use and media presentation. According to Munir (2015) the first aspect of the assessment is the appearance of the product, in this aspect it has 3 indicators, including the appearance of the product which is adapted to the age of elementary school children, the use of type and size of letters in the media and the suitability of the image with the material made. An attractive and bright product display will more easily attract students' interest in learning, according to their opinions (Indah, 2021). Mind with opinion Jalinus, & Ambiyar (2016), states that the media are people, materials and events which can improve students' cognitive, affective and psychomotor abilities. Based on opinion (Hasnida, 2014) interpret the media as equipment or means of delivering messages. Interesting picture media is one of the learning tools that can increase student interest in learning. Reinforced by opinion Melyanti (2019) that the coherence of the material can make it easier for students to understand the material presented by the teacher.

Based on the 4 aspects of the assessment above, the results of the media expert validation resulted in a percentage of 93.75%, where based on the validation criteria according to Akbar (2017) the percentage of 93.75% belongs to the range of 85.01% - 100.00% this shows that the capcut-assisted learning media product on theme 2 sub-theme 1 learning 6 is included in the very valid category so that the product can be used without revision. Suggestions and inputs from media expert validators remain the basis for improving capcut-assisted learning products, while the advice given by media experts is to pay attention to the devices used by students, it can be with hybrid learning. After the product was revised, the capcut-assisted learning product on theme 2 subtheme 1 learning 6 was valid according to media experts and in accordance with 4 aspects of the assessment, namely aspects of product display, learning media, product use and presentation of learning media.

Practicality Test by User/Teacher

User/teacher validation was carried out on September 15, 2022 directly at SDN Kauman 2 Blitar City together with the class II homeroom teacher. User/teacher validation was carried out with the aim of knowing the level of practicality of capcut-assisted learning media products. The assessment aspect consists of 4 aspects based on opinions Hidayati (2013: 14) namely the suitability of the material, the presentation of the material, the presentation of the product and the use of the product. Each aspect of the assessment consists of 3 different indicators, for assessments ranging from a score range of 1 - 4 with criteria from poor to very good. In line with opinion Ridoi (2018) that interesting learning media can increase happiness and reduce stress.

Based on the practicality questionnaire of users/teachers, the percentage results are 100%, this shows that the learning media belongs to the very valid category and can be used without revision. Validation category refers to opinion Akbar (2017) where the percentage of 100% is in the range of 85.01% - 100.00%. However, there are some suggestions from users/teachers, namely, the learning media used are good and very helpful for learning in the classroom.

Attractiveness and Practicality Based on Trial Results

The product trial was carried out twice, namely the first trial for small groups and the second trial for large groups. The trial was carried out on class II students of SDN Kauman 2. In your opinion Rusdi (2018), the trial phase was carried out with the aim of knowing the level of practicality and attractiveness of the product according to class II students in accordance with the objectives of research and development. The following is a discussion of product trials for small groups and large groups.

Small Group Trial and Large Group Trial

The small group trial was held on September 20, 2022 at SDN Kauman 2 and was attended by 3 grade II students with categories of 1 student with high ability, 1 student with medium ability and 1 student with low ability. The results of the practicality and attractiveness of students in small-scale trials obtained the percentage results of 100% of students answering "Yes" and 0% answering "No" to the questions asked. Based on the results of the practicality and attractiveness questionnaire, according to Akbar dalam Irmawati, dkk. (2017) that the percentage of 100% is included in the level of achievement of 85.01% - 100.00%, it can be concluded that the capcut-assisted learning media product belongs to the very attractive category and can be used without revision.

After conducting a small group trial and revising the product, a large group trial was conducted which was held on September 22, 2022 at SDN Kauman 2 with a total of 25 second grade students. The purpose of this trial is to determine the level of practicality and attractiveness of the product. The trial activities carried out were not much different from the small group trials, namely after the material was given and the students applied the capcut-assisted learning media products, the students were then given a practicality and attractiveness questionnaire to fill in according to their personal opinion. According to opinion Waryanto (2008) The questionnaire given aims to determine the level of attractiveness and practicality of the product, as well as the extent to which students are able to apply character to students.

The results of the practicality and attractiveness questionnaire of students in the large group trial filled by 25 students of SDN Kauman 2, obtained the results of the analysis of the student response questionnaire that 98.8% of students answered "Yes" and 1.2% answered "No" to the questions asked. . Based on the results of the practicality and attractiveness questionnaire, according to Akbar (2017) that the percentage of 98.8% is included in the level of achievement of 85.01% - 100.00%, it can be concluded that the capcut-assisted learning media product belongs to a very interesting and practical category. It can be concluded that in addition to being interesting and practical, students can understand the material provided through capcut-assisted learning media.

The results of the products that have been developed and have gone through the revision and product testing stages, produce the final product in the form of capcut-assisted learning media that can be used by students to study on theme 2 sub-theme 1 learning 6. However, every product made cannot be said to be perfect because it will there are always weaknesses and strengths of these products, not least with capcut-assisted learning media products on theme 2 sub-theme 1 learning.

D. CONCLUSION

Based on the results of data analysis, it can be concluded that the learning media products assisted by capcut on theme 2 sub-theme 1 learning 6 grade II elementary school students that have been developed are included in the feasible and usable category. The results of the validity test of learning media products show very valid validity with an average validation value according to material experts of 100% in the very valid category, media experts at 93.75% in the very valid category, and users/teachers at 100% in the very category. valid. While the results of the practical validity test and interesting learning media products with an average value of 98.8% which can be categorized as very practical and interesting. Based on the results of the analysis, the capcut-assisted learning media products on theme 2 sub-theme 1 learning 6 can be declared valid according to material experts, media experts, and users, as well as practical, interesting and effective for grade II elementary school students.

REFERENCES

Akbar, Sa'dun. (2017). Instrumen Perangkat Pembelajaran (158). Remaja Rosdakarya.

- Amalia, Y. (2020). Pengembangan Media Game Edukasi "Petualangan Si Isaac " Berbasis Android Pada Materi Gaya Kelas Iv Sekolah Dasar. *Pendidikan*, 08, 240–249.
- Arikunto, Suharsimi. (2010). Prosedur Penelitian: Suatu Pendekatan Praktik. Rineka Cipta.
- Hamzah, A. (2020). Metode Penelitian & Pengembangan. Literasi Nusantara Abadi.
- Hasnida. (2014). *Media Pembelajaran Kreatif: Mendukung Pembelajaran pada Anak Usia Dini*. PT Luxima Metro Media.
- Hidayati, N. (2013). Analisis Penggunaan Media Pembelajaran Pada Mata Pelajaran Ekonomi Materi Akuntansi Kelas XI IPS di SMA Negeri 1 Gedangan Sidoarjo. : Akuntansi UNESA.
- Indah, D. dkk. (2021). *Pembelajaran Praktik Baik untuk Peserta Didik*. Banjarmasin: Tinta Merah Indonesia.

Jalinus, N., & Ambiyar. (2016). Media dan Sumber Belajar. Kencana.

- Mahanani, P. (2020). *Profil Guru Ideal Kunci Kemajuan Kualitas Generasi Emas* 2045. (https://scholar.google.com/)
- Martha, M. S., Akbar, S., & Mahanani, P. (2020). Pembelajaran Pendidikan Karakter Peduli Lingkungan Melalui Program Adiwiyata di SDN Bunulrejo 2 Kota Malang. Jurnal Pendidikan Dasar Nusantara, 6(1), 84–102. https://doi.org/10.29407/jpdn.v6i1.14427
- Melyanti, S. (2019). Pengembagan Media Pembelajaran Buku Saku Berbasis Mind Mapping. Makassar: Universitas Negeri Makassar.
- Muis, M. (2019). Model Pembelajaran Berdasarkan Masalah. Gresik: Caremedia Communication.
- Munir. (2015). Multimedia dan Konsep dalam Pendidikan. Alfabeta.
- Muzaki, F. Irham. (2017). "Membelajarkan Bahasa Indonesia Untuk Generasi Digital Di Sekolah Dasar." 2017, Wahana Sekolah Dasar; Vol 25, No 1 (2017). http://journal2.um.ac.id/index.php/wsd/article/view/3172/1959.
- Nugraheni, D., & Winarni, D. S. (2018). *Pengembangan Bahan Ajar Science Teacherpreneurship* Berbasis Karakter Bagi Mahasiswa Pendidikan IPA. 1–5.
- Nurrita, T. (2018). Pengembangan Media Pembelajaran untuk Meningkatkan Hasil Belajar Siswa. Jurnal Misykat, Volume 03, Nomor 01.
- Nurrohmah, F. (2018). "Pengembangan Media Pembelajaran Berbantuan Sparkol Videoscribe ", Jurnal Ilmiah Pendidikan MIPA,. Vol. 8,(No. 3,), hlm. 235.
- Peraturan Menteri Pendidikan dan Kebudayaan No. 37 Tahun 2018 Tentang Kompetensi Inti dan Kompetensi Dasar. (n.d.). Jakarta : Depdiknas.
- Permana. (2020). Buku Ajar Morfologi Hewan dan Tumbuhan Gambar 3D Stereoscopic untuk Siswa Kel*as IV SD ISBN*. Bandung: CV. Media Sains Indonesia.
- Permendikbud No 22 Tahun 2016 tentang Standar Proses Pendidikan Dasar dan Menengah.pdf.
- Permendikbud Nomor 37 Tahun 2018.pdf.
- Ridoi. (2018). Cara Mudah Membuat Game Edukasi dengan Construct 2,. (Online), (https://books.google.co.id/ books?id=k2VSDwAAQBAJ&hl=id),
- Risqy, K., Akbar, S., & Nawawi, I. (2021). Penguatan Pendidikan Karakter Siswa SD Melalui Pembiasaan pada Pembelajaran Jarak Jauh. Jurnal Pembelajaran, Bimbingan, Dan Pengelolaan Pendidikan, 1(6), 2021, 447–455. https://doi.org/10.17977/um065v1i62021p447-455
- Rusdi. (2018). Penelitian Design dan Pengembangan Kependidikan. Jakarta: Rajawali Pers.
- Sugiyono. (2016). Metode Penelitian Pendidikan. Alfabeta.
- Sumardi. (2020). Teknik Pengukuran dan Penilaian Hasil Belajar. Yogyakarta: : Deepublish Publisher.
- Suryaman, S., & Suryanti, Y. (2022). Pengembangan media video animasi berbasis plotagon dan capcut untuk meningkatkan hasil belajar kognitif siswa kelas ii sekolah dasar. Jurnal Cakrawala Pendas, 8(3), 841–850. https://doi.org/10.31949/jcp.v8i3.2575
- Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional. (2021). (http://www.jdih.bpk.go.id),
- Waryanto, N. H. (2008). Pelatihan Penyusunan Materi Soal Matematika Interaktif Web dengan Menggunakan Perangkat Lunak Bantu Articulate Quiz Maker 2.1 Bagi Guru Sekolah Menengah Daerah Istimewa Yogyakarta. Yogyakarta: Fakultas Matematika UNY.
- Widyawati, A., & Prodjosantoso, A. K. (2015). Pengembangan Media Komik Ipa Untuk Meningkatkan Motivasi Belajar Dan Karakter Peserta Didik Smp. Jurnal Inovasi Pendidikan IPA, 1(1), 24. https://doi.org/10.21831/jipi.v1i1.4529
- Wulandari, R., & Hermita, N. (2022). Pengembangan media pembelajaran tari berwawasan peduli lingkungan di sekolah dasar. 11, 15.