

(D

# Video Learning Based On The Indonesian Language Signing System (SIBI) Method For Class II Deaf Chill At SD

# Ni Kadek Intan Wahyuni<sup>1\*</sup>, I Made Suarjana<sup>2</sup>, Dewa Ayu Puteri Handayani<sup>3</sup>

1,2 Ganesha University od Education, Singaraja, Bali, Indonesia

## ARTICLE INFO

## ABSTRACT

Article history: Received March Revised March Accepted July Available online

#### Kata Kunci:

Pengembangan Video Pembelajaran, Metode Sistem Isyarat Bahasa Indonesia, Siswa Tunarungu

#### Keywords:

Learning Video Development, Indonesian Sign System Method, Deaf Studentd



This is an open access article under the <u>CC BY-SA</u> license.

This research is development research (research and development). The product developed is Learning Video Media Based on the SIBI Method for Deaf Children, Grade II. This study aims to (1) determine the design of learning video media based on the SIBI method for grade II deaf students; (2) determine the validity of learning video media based on the SIBI method for grade II deaf children; and (3) determine the response of deaf students to learning video media based on the SIBI method for grade II deaf children. The 4D (four-D) model is a method used in the process of developing learning videos based on the SIBI method. The data collection method used is a questionnaire, which is then filled out by the respondents. Data analysis methods and techniques used in this research are qualitative and quantitative descriptive statistical analysis. In this SIBI method-based learning video media obtained a validation score by learning media experts of 94.5% (very good), then the validity test score by learning material experts was 97.85% (very good), then the results of media assessment through practitioner/teacher responses were 93.5% (very practical), and through student responses, a score of 86% (good). It is concluded that this development research obtained results with very good and very practical qualification levels, so that the products produced

are feasible to be applied and used in the learning process for deaf children in grade II SDN 2 Bengkala.

 ${\it Copyright} @ {\it 2021 by Author. Published by Universitas Pendidikan Ganesha.}$ 

# 1. INTRODUCTION

Education is something that has a big impact on how people develop. Humans can improve their intelligence and reach their full potential with education. There is a need for a deeper investigation of education because it is a continual process that never stops. As a result, clarity on the foundation of education itself came to be considered when considering education philosophically. Government-funded educational services do not take into account or differentiate between pupils' social, economic, or physical conditions. Such as students who experience physical, emotional, mental, social or special talent abnormalities commonly referred to as children with special needs. Children with special needs who experience abnormalities/disorders (physical, mental and emotional) are entitled to special education and learning.

Children with special needs are children who in education require specific services so that they are different from children in general (Rapisa, 2018). Children with these limitations really need special handling both from social and educational services. Educational services provided for children with special needs are not the same as those provided for other normal children because they must be specially designed with objectives, learning strategies in the form of applying media and methods, and learning evaluations that aim not only to develop skills but also to develop intellectual and emotional intelligence that deserve attention from class teachers or teachers who teach in class (Maulida & Zulfitria, 2017). For this reason, the Indonesian government has made efforts to equalize education for children with special needs by creating special education services for children with special needs called Sekolah Luar Biasa (SLB). A special school is a formal educational institution that serves education for children with special needs and is formed by many elements directed at achieving educational goals.

However, there are still limited special education services in some areas, making it difficult for parents to keep sending their children to special schools. Given these problems, the government has also found the latest solution by creating inclusive schools. Inclusive education is intended as an education service system that includes children with special needs learning together with their peers in the regular

school closest to their place of residence, and the school provides educational services that are in accordance with the special needs of each child (Yuwono, 2017). Teachers must master learning services for children with special needs. For example, learning methods and learning media that are suitable for children with special needs. It cannot be denied that what best supports the success of school program management is the availability of qualified human resources, infrastructure, and support from the community and parents of students (Sirojuddin, 2020).

One of the inclusive education services in Buleleng district is located in Bengkala village, Kubutambahan sub-district. Bengkala village is known as a special village that has a large deaf-mute community. There are 43 deaf-mute residents in Bengkala village who are called *kolok* residents. (Michi, 2017) states that this phenomenon is caused by local endogamous marriages practiced from generation to generation in small populations. In Bengkala village, *kolok* residents receive equality with normal residents. In the field of education, there is SD Negeri 2 Bengkala, which is an inclusive school.

*Kolok*, or deaf children, are children who have hearing loss either completely or still have residual hearing so that they cannot hear sounds perfectly or even cannot hear at all, which is classified into deafness and hearing loss (Nofiaturrahmah & Kudus, 2018). Due to hearing impairment, deaf children are likely to have speech impairment. Deaf children's speech impediments have an impact on communication difficulties (poverty of vocabulary and language) (Permatasari et al., 2019). Therefore, the learning process for deaf children must be carried out with special methods.

Based on the results of observations that have been carried out, the achievement and learning process of deaf children tend to be influenced by their ability to understand subject matter, especially mathematics, which requires students to have the ability to think abstractly. Mathematics is one of the lessons taught to students that is useful in everyday life and can support other subjects. From the results of interviews with the homeroom teacher of SD Negeri 2 Bengkala, Mrs. Kadek Mahendri, it is said that there are no special learning methods and media for deaf children, especially in learning mathematics. Math learning given to deaf children is not too in-depth but only on understanding abilities (Febriyanti & Nugraha, 2017). Based on this situation, it is certainly necessary to improve the learning process towards a better direction so that learning for deaf children becomes more effective and efficient and achieves learning objectives by creating a learning media that can increase the interest and understanding of deaf students. What is meant is to develop learning media that is audio-visual to be more interesting both in terms of appearance and in terms of delivery that is suitable for deaf children.

Deaf children communicate using sign language, specifically Sistem Isyarat Bahasa Indonesia (SIBI) and Bahasa Isyarat Indonesia (Bisindo). SIBI is widely used in educational institutions, facilitating effective communication with deaf children. To increase deaf children's interest in math lessons, a video learning medium should be developed in collaboration with SIBI. This alternative learning medium can enhance the learning process and improve the understanding of counting operations in math lessons. This research aims to develop learning media based on the SIBI (Indonesian Sign Language System) method on the topic of arithmetic operations of multiplication and division of small numbers in grade II elementary school.

#### 2. METHOD

This research is a development of learning media based on the SIBI method for the material of multiplication and division counting operations. The model used in this research is the 4-D model. The 4-D model is carried out through four stages, including the defining stage (define), the planning stage (design), the development stage (development), and the dissemination stage (disseminate) (Syafri, 2018). There are two types of data in this research, qualitative data and quantitative data.

No	Phase	Activities		
1	Define	1. Front-End Analysis		
		2. Leaner Anlysis		
		3. Concept Analysis		
		4. Task Analysis		
		5. Specification Objectives		
2	Design	1. Determining Basic Competencies and Competency		
		Achievement Indicators		
		2. Determine the scope of the material		

Tabel 1. Tabel Learning Video Development Procedure

		3. Create a preliminary draft and script		
3	Development	1. Riview material expert lecturer		
		2. Riview media expert lecturer		
		3. Practitioner review		
4	Disseminate	Disseminating learning videos for deaf students at SDN 2		
		Bengkala		

The subject of this research trial was SIBI medtoe-based math learning video media on multiplication and division math operations for deaf students in grade II elementary school. This learning video media was tested by several experts, practitioners and several student responses. The object of the trial in this study is the validity and practicality of the SIBI method-based mathematics learning video media on counting operations of multiplication and division of small numbers for deaf students in grade II elementary school.

The data collection method in this study was carried out through formative evaluation which included (1) data on the results of the content/material review of the field of study, data on the results of the learning media expert review, (2) data on the results of small group trials in the form of student reviews. Data is categorized into qualitative and quantitative data, obtained through expert reviews and questionnaires. Research on developing learning media using SIBI method for deaf students in grade II uses observation, interview, and questionnaire methods. Questionnaire collects data from expert reviews, student reviews, and practitioners using a rating scale instrument.

The data analysis techniques used were qualitative descriptive statistical analysis and quantitative descriptive statistical analysis. Qualitative analysis was used with the aim of proving the validity of mathematics animated video media based on the SIBI method. This method is used to find and process data in the form of criticism and suggestions from expert reviews of the video media developed. Meanwhile, this quantitative analysis is used to describe the average score of the developed learning video. The instrument tests used are validity test, practicality test, and reliability test. The scores that have been obtained will then be calculated on average to find the validity of the teaching materials to be developed using the mean formula.

## 3. RESULT AND DISCUSSION

#### Result

This research aims to develop learning media based on the SIBI (Indonesian Language Sign System) method on the topic of arithmetic operations of multiplication and division of small numbers in grade II elementary school. The subject of this research is learning media based on the SIBI method on the topic of counting operations of multiplication and division of integers in grade II. Meanwhile, the object of this study is to determine the validity of learning media based on the SIBI method on the topic of counting operations of multiplication and division of integers in grade II. Meanwhile, the object of this study is to determine the validity of learning media based on the SIBI method on the topic of counting operations of multiplication and division of integers in grade II. This research uses the 4D development model. The 4D model consists of four stages: (1) define; (2) design; (3) develop; and (4) disseminate.

This SIBI method-based learning video development research's implementation seeks to: 1) ascertain the design of SIBI method-based mathematics learning video media on counting operations of multiplication and division of numerical numbers in class II elementary school; 2) ascertain the validity of SIBI method-based mathematics learning video media on counting operations of multiplication and division of numerical numbers in class II elementary school; 2) ascertain the validity of siBI method-based mathematics learning video media on counting operations of multiplication and division of numerical numbers in class II elementary school; and 3) ascertain the effectiveness of the SIBI method-based mathematics learning video media.

### Design and Build Learning Video Media Based on SIBI Method

The development of learning videos using the *SIBI* method for deaf students has been initiated through various analyses, including end-start, student, concept, task, and formulation of learning objectives. The initial-end analysis reveals the need for an intermediary tool for deaf students in grade II elementary school to analyze and build concepts independently. This stage is carried out by carrying out observations and observations in the learning process carried out in grade II SD N 2 Bengkala. Observations and observations are also carried out to obtain information about obstacles or problems faced by teachers who teach in grade II in the learning process.

Based on the results of these observations and observations. It was found that in the learning process carried out at SD N 2 Bengkala which can be said to be an inclusion school with some deaf students, namely not much use of learning media and more using the lecture method. The learning of deaf students is still combined with other students, so teachers experience obstacles in teaching deaf students. Then there is a lack of material sources or material support on the topic of operations to calculate multiplication and

division of numbers so that the material presented is very limited. Therefore, it is necessary to develop material on the topic of multiplication calculation operations and division of numbers for deaf children through creative and innovative learning media, namely learning media based on *the SIBI* method.

The student analysis stage aims to find out the characteristics of students so that later the development design will be carried out in accordance with student characteristics. Grade II students of SD N 2 Bengkala are on average 8 years old. At the age range of 8 years this child has been able or mature enough to use logic thinking and operations, but not for everything but limited to real objects or physical (Ibda, 2015). But it is different from two students who can be categorized as deaf children, because they have limitations in hearing and speech. Murni Winarsih suggests that deafness is a general term that indicates difficulty hearing from mild to severe, classified into deaf and hearing impaired. which belongs to the concrete operational stage. Deaf children can be said to experience obstacles in the development of language or speech, so they need special services, one of which is in the field of education. Deaf children generally have lower achievement than other normal children, especially in learning mathematics. This is greatly influenced by the language development of deaf children. Therefore, it is necessary to develop media combined with the *SIBI* method that can be used specifically in learning deaf children material on the topic of multiplication and division operations in class II.

The concept analysis focuses on counting operations of multiplication and division, while the task analysis identifies counting, listening, and listening skills. Concept analysis is carried out by analyzing the teacher's syllabus and books after knowing some of the problems faced, especially in learning Mathematics learning. The result of this concept analysis is the preparation of Basic Competencies and Indicators which are references in the preparation of material that will be included in the media to be developed. Basic Competencies and Indicators that have been compiled are shown in the Table 2.

Basic Competencies	Competency Achievement Indicators	
3.4 Explain multiplication and division involving numbers with products up to 100 in everyday life and relate multiplication and division.	<ul> <li>3.4.1 Calculate multiplication and division in problems involving numbers with products up to 100 in everyday life correctly.</li> <li>3.4.2 Solve multiplication and division problems involving numbers with products up to 100 in everyday life precisely.</li> </ul>	
4.4 Solve multiplication and division problems involving numbers with products up to 100 in everyday life and associate multiplication and division.	4.4.1 Do multiplication problems involving numbers with products up to 100 in everyday life right.	

**Table 2.** Basic Competencies and Achievement Indicators in Class II Multiplication and Division Calculation

 Operations

The activity of this task analysis is carried out to identify various main skills needed in learning activities by analyzing basic competence in more specific indicator sub-chapters. Based on the indicators compiled, skills in counting, listening and listening. All these skills are indispensable in this learning process. The formulation of learning objectives is based on competency standards and indicators, aiming to help students recognize multiplication as repeated addition and division as repeated subtraction. The design stage involves compiling media assessment instruments, including validity tests for material experts, practitioners, and students. The purpose of using learning through the development of this media is, (1) students are able to recognize multiplication as repeated addition, (2) students are able to recognize division as repeated addition.

The final stage involves designing the media, including scripts and storyboards, which contain the narrator's narration and scene design. The design or prototype in this study is an initial description of the basic content of a learning media that visually displays the learning media to be developed. In research, the development of learning media based on the SIBI method on the topic of multiplication calculation operations and division of grade II elementary schools will produce a media product where the creation, opening and closing of the *Capcut* application. The product in this study focuses on material on the topic of operations to calculate multiplication and division of grade II elementary school with a duration of 6-10 minutes.

The development stage is carried out through the manufacture of early-stage products, product assessment by experts, product revision, practitioner product assessment, student response, and making the final product. Making this learning media includes recording narrator videos that explain learning with

the *SIBI* sign method and is divided into 4 stages, namely opening, introduction, content and closing according to the *storyboard* or script above. Then the *editing* process is carried out with the *Capcut* assistance application which consists of adding a background or *background*, animation and supporting images, motion effects, text, and *backsound*. Then after going through the *editing* process, it will then be converted in the form of MP4 or video.

In making the initial product, it is done by developing scripts and storyboards that have been designed and made into teaching video media based on the SIBI method. After the initial product is produced, the SIBI Method-Based Learning Video that has been developed is then assessed to obtain validity results and student responses. The assessment process on *the SIBI* method-based learning video media product for deaf children is carried out by providing a validation sheet containing assessment instruments. The purpose of this product test is to determine the level of product validity through the test of material and media experts, and to determine the level of practicality of the product through assessment by practitioner responses and also student responses.

#### Feasibility of Learning Video Media Based on SIBI Method

Validity is one of the benchmarks to show the level of perfection of a product that has been developed based on several aspects of assessment. Product validity tests and student responses were carried out using a validity test assessment sheet involving two material experts, two media experts, two practitioners, and two deaf students to respond to the SIBI method-based learning video developed. Instrument testing serves to obtain a concrete assessment. The instrument used is a questionnaire. The instrument's validity is assessed using assessment criteria, with a score of 1 for media expert, material expert, practitioner response, and student response instruments. Data processing results show a very high or very valid achievement category for these instruments.

The feasibility of learning video media based on the SIBI method is divided into five explanations including: 1) The results of instrument validity through assessment instrument tests by experts / experts, 2) The results of reviews of learning video media products based on the *SIBI* method by expert experts, namely material experts and media experts, 3) The results of practitioner responses to find out the practicality of the products developed, 4) Knowing the responses from students, 5) Media revision after getting advice and input from material experts and media experts.

Tuble of Tereentage of Tahatij Results of Deathing Theo Development							
No	Learning Video Test Subjects	Result Validity (%)	Information				
1	Learning Media Expert Test	94,5	Excellent				
2	Subject Expert Test	97,85	Excellent				
3	Teacher Trials	93,5	Excellent				
4	Student Trials	86	Good				

#### Table 3. Percentage of Validity Results of Learning Video Development

This product was assessed or reviewed by learning media expert lecturers, namely (1) Dr. I Made Tegeh, S.Pd., M.Pd., (2) Dr. Gede Wawan Sudatha, S.Pd., M.Pd. Based on the results of the assessment by the two learning media experts, the following percentage of the calculated results for media validity. Percentage of Rater I = 95%

Percentage of Rater II = 94%

The following is the percentage of the overall calculation of the two media experts and the level of achievement of the validity of the learning media

Percentage = F : N

= (95% + 94%) : 2

= 94,5%

The results of the overall calculation from the learning material expert show a percentage of 94,5%. Based on the percentage results from the assessment of the two experts, it can be concluded that the audiovisual learning media based on the SIBI method is at a very good qualification level.

Furthermore, theresults of this development research are Learning Media based on *the SIBI* Method for Class II Deaf Children at SDN 2 Bengkala. This product is assessed or *reviewed* by expert lecturers in Mathematics subjects, namely (1) I Made Hendra Sukmayasa, S.Pd., M.Pd., (2) Ni Putu Widyastusti, S.Pd., M.Pd. The indicators assessed are learning objectives, learning materials, and learning activities. Based on the results of the assessment by the two learning material experts, the following is the percentage of the calculation results for media validity.

Percentage of Rater I = 96.8% Percentage of Rater II= 98.9% The following is the percentage of the overall calculation results from both material experts and the level of achievement of learning media validity

Percentage = F : N

= (96.8% + 98.9%) : 2

= 97.85%

The results of the overall calculation from learning material experts show a percentage of 97.85%. Furthermore, it is included in the level of media achievement using a reference scale of 5. Based on the percentage results of the assessment of the two experts, it can be concluded that the audio visual learning media based on the SIBI method is at a very good qualification level.

The developed product will be able to increase the use of learning media, especially for deaf children in mathematics learning that explains the topic of multiplication and division counting operations. Therefore, the developed product was tested for validity by the second grade teacher.

The teachers who gave an assessment of the media developed were Mrs. Kadek Mahendri, S.Pd and Ni Putu Sukartini, S.Pd. Based on the results of the assessment by the two learning media experts, the following percentage of the calculated results for media validity.

Percentage of Rater I = 91%

Percentage of Rater II = 96%

The following is the percentage of the overall calculation of the two practitioners and the level of achievement of the validity of the learning media

Percentage = F : N

= (91% + 96%) : 2

= 93,5%

The results of the overall calculation of the learning material experts show a percentage of 93.5%. So it can be concluded that the percentage results from the assessment of the two practitioner responses are at a very practical qualification level.

Two students' responses to learning video media based on the SIBI method The following is the percentage of the calculated results of media validity.

Percentage of Rater I = 80%

Percentage of Rater II = 92%

From the results of student respondents, it can be calculated that the overall percentage of SDN 2 Bengkala students is as follows.

Percentage = F : N

=(80% + 92%):2

= 86%

It can be concluded, the average percentage of both responses of deaf students of SD N 2 Bengkala is 86% with the acquisition of good qualifications. It can be concluded that the learning video media based on the SIBI method is included in good qualifications and is practical in the learning process.

Subsequently, product improvement or revision was carried out based on the comments and suggestions of the experts, including the cover, improvement of the objective sentence, text placement, and animation, followed by product assessment from practitioners and student responses.

Referring to the results of the validity and student response to the learning video based on the SIBI method, deaf students obtained very good qualifications because it states that the learning video based on the SIBI method is said to be valid and has feasibility in learning activities involving teachers and deaf students in class II SDN 2 Bengkala. The use of this learning video facilitates students' learning both in bulk and in groups (Hadi, 2017). Students in grade II elementary school are in the concrete operational stage, where they can utilize their wits to think logically in addressing everything that is concrete or real (Juwantara, 2019). In the implementation of mathematics learning, grade II students need real examples so that they better understand the material. Learning videos are also able to assist teachers in the process of delivering material, which makes the learning process more motivating for students to keep up with learning (Salsabila, 2020). Video media can also facilitate the development of students' creative ideas by visualizing them in the form of video and audio presented together in the video (Pebriani, 2017).

Every word in SIBI (Indonesian Sign Language System), a sign language that uses both hands for communication. Indonesian inclusive and special schools frequently employ SIBI. SIBI is one of the medium that aids in the communication of the deaf and the deaf, more specifically. Its shape is an organized sequence of hand gestures, finger signals, and other motions that represent Indonesian words. According to this justification, the creation of learning video media based on the SIBI method is appropriate for deaf students. By watching existing learning videos and solving the provided sample problems, students can actively participate in learning, which is sure to improve student understanding of the material.

The SIBI method-based learning video developed is different from the SIBI method-based learning videos that have been developed previously. The difference is that the material developed, namely the material for calculating multiplication and division operations in class II, has never been developed by other researchers. This SIBI method-based learning video was developed using the Capcut application, which contains images, animations, audio, background sound, and learning videos that are relevant to the material. It was designed so that students become enthusiastic about using SIBI method-based learning videos during the learning process.

## Discussion

Referring to the results of validity and student response to the SIBI method-based learning video for deaf students obtained very good qualifications, because it stated that the *SIBI* method-based learning video was said to be valid and had feasibility in learning activities involving teachers and deaf students grade II SDN 2 Bengkala. The use of this learning video facilitates students when learning both en masse, individually and in groups (Hadi, 2017). Students in grade II elementary school are in the concrete operational stage where in this stage students can use their intellect to think logically in responding to everything that is concrete or real (Juwantara, 2019). In the implementation of Mathematics learning, grade II students need real examples so that students better understand the material. Learning videos are also able to help teachers in the process of delivering material which causes the learning process to be more motivated to keep students engaged in learning (Salsabila, et al. 2020). Video media can also facilitate the development of students' creative ideas by visualizing in the form of video and audio presented together in video (Pebriani, 2017).

The results of this study are related to research by (Putri et al., 2019) who developed a learning video with character education-based sign language at SDLB. In the study, it was concluded that there was a significant difference in student learning outcomes before using teaching videos with students after using learning videos.

However, the SIBI method-based learning videos developed are different from the SIBI methodbased learning videos that have been developed previously. For example in research by (Setyaningrum, 2016) who developed SIBI-based physics learning videos on vibration and wave material. The difference can be seen from the material developed. Learning videos based on the SIBI method with class II multiplication and division counting operation material have never been developed by other researchers. However, judging from the results of the research, these two studies produced relatively similar results, namely that they could increase students' interest in learning.

Based on this, the advantages and disadvantages of using the SIBI Method-Based Learning Video for Deaf Children in Class II SDN 2 Bengkala, namely the advantages; 1) can display material explanations and solve examples of multiplication and division problems with images, animations, music, or audio that can increase the understanding of deaf students; 2) can be used in groups or individually, anywhere and anytime; 3) Increase the learning interest and activeness of deaf students. While the shortcomings are: 1) learning videos are only made specifically for deaf children; normal children can use them but not children with other special needs categories; 2) They cannot be used if they are not connected to mobile data due to limited facilities and also require a good internet signal to display the video.

#### 4. CONCLUSION

This development research produces products in the form of learning video media based on the SIBI method for deaf students in grade II SDN 2 Bengkala on the material of multiplication and division counting operations. Teachers can utilize SIBI method-based learning videos on multiplication and division counting operations for deaf children in grade II SDN 2 Bengkala. In addition, deaf students can also learn independently, especially on the material of multiplication and division counting objectives can be achieved optimally.

## 5. REFERENCES

Febriyanti, C., & Nugraha, M. L. (2017). KESULITAN PEMBELAJARAN MATEMATIKA SEKOLAH INKLUSI. Jurnal SAP, 2(2), 151–158. https://journal.lppmunindra.ac.id/index.php/SAP/article/viewFile/2087/1586

Hadi, S. (2017). Efektivitas Penggunaan Video Sebagai Media. *Prosiding TEP & PDs, Tema: 1 No*, 96–102. https://core.ac.uk/download/pdf/267023793.pdf

- Ibda, F. (2015). Perkembangan Kognitif: Teori Jean Piaget. *Intelektualita*, *3*(1), 242904. https://jurnal.arraniry.ac.id/index.php/intel/article/viewFile/197/178
- Juwantara, A. R. (2019). Analisis Teori Perkembangan Kognitif Piaget Pada Tahap Anak Usia Operasional Konkret 7-12 Tahun Dalam Pembelajaran Matematika. *Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 9(1), 27–34. https://core.ac.uk/download/pdf/327227393.pdf
- Maulida, A., & Zulfitria. (2017). Pengembangan kecerdasan interpersonal anak autis melalui pemanfaatan media puzzle pada siswa kelas 2 sekolah dasar. 120–130. https://jurnal.umj.ac.id/index.php/holistika/article/view/2506
- Michi, S. A. (2017). Analisi Genealogi & Mean Matrimonial Radius Populasi Tuli-Bisu di Desa Bengkala, Buleleng, Bali. *LIBRI-NET*. https://repository.unair.ac.id/67389/1/Fis.ANT.22.17 . Mic.a JURNAL.pdf
- Nofiaturrahmah, F., & Kudus, I. (2018). Problematika Anak Tunarungu DAN CARA MENGATASINYA. *QUALITY*, *6*, 1–15. https://journal.iainkudus.ac.id/index.php/Quality/article/viewFile/5744/3660
- Pebriani, C. (2017). Pengaruh penggunaan media video terhadap motivasi dan hasil belajar kognitif pembelajaran IPA kelas V. *Jurnal Prima Edukasia*, *5*(1), 11–21. https://doi.org/10.21831/jpe.v5i1.8461
- Permatasari, K., Degeng, I. N. S., & Adi, E. P. (2019). Pengembangan Suplemen Video Pembelajaran Adaptasi Makhluk Hidup Untuk Siswa Tunarungu Slb-B Yplb Blitar. *JKTP Jurnal Kajian Teknologi Pendidikan*, 2(4), 268–277. http://journal2.um.ac.id/index.php/jktp/article/view/9147
- Putri, N. M., Parmiti, D. P., & Sudarma, K. (2019). Pengembangan Video Pembelajaran dengan Bahasa Isyarat Berbasis Pendidikan Karakter pada Siswa Kelas V di SDLB-B Negeri I Buleleng Tahun Pelajaran 2017/2018. Jurnal EDUTECH Universitas Pendidikan Ganesha Undiksha, 7(2), 81–91. https://ejournal.undiksha.ac.id/index.php/JEU/article/view/23162
- Rapisa, D. R. (2018). KEMAMPUAN GURU DALAM MELAKUKAN IDENTIFIKASI ANAK. Jurnal Ilmu Pendidikan, 15–24. http://eprints.ulm.ac.id/3436/1/10731-23096-1-PB.pdf
- Salsabila, V. (2020). Analisis Pemahaman Konsep Matematika Menggunakan Media Video Pembelajaran Matematika Di Kelas Iii C Sdn Dewi Sartika Cbm. *Didaktik : Jurnal Ilmiah PGSD STKIP Subang*, 6(1), 148–154. https://doi.org/10.36989/didaktik.v6i1.123
- Setyaningrum, A. (2016). Pengembangan Video Pembelajaran Fisika Berbasis Sibi Pada Materi Getaran Dan Gelombang Sebagai Media Belajar Mandiri Untuk Meningkatkan Minat Belajar Pada Peserta Didik Tunarungu Devolepment of Physics Learning Video Based on Sibi on Subject Matter of Vib. Jurnal Pendidikan Fisika, 5(1), 38–45.
- Sirojuddin, A. (2020). Optimalisasi Manajemen Sekolah Dalam Menerapkan Pendidikan Inklusi di Sekolah Dasar. Jurnal Manajemen Pendidikan Islam, 1, 131–139. https://www.pasca.jurnalikhac.ac.id/index.php/munaddhomah/article/view/36
- Syafri, F.S. 2018. Pengembangan Modul Pembelajaran Aljabar Elementer di Program Studi Tadris Matematika IAIN Bengkulu. CV Zigie Utama.
- Yuwono, I. (2017). *Indikator Pendidikan Inklusif*. Zifatama Jawara. http://eprints.ulm.ac.id/6527/1/LAYOUT BUKU INDIKATOR PENDIDIKAN INKLUSIF FIX.pdf