



## Enhancing Learning Motivation of Students with Special Needs Using Learning Video

Khoerul Umam Kholis,<sup>1✉</sup> Kustiyo<sup>2</sup>

<sup>1</sup>Educational Quality Assurance Agency, City of Tidore Islands, North Maluku, Indonesia

<sup>2</sup>Faculty of Education, Universitas Negeri Semarang, Semarang, Indonesia

DOI: <https://doi.org/10.15294/ijcets.v8i1.16265>

### Article History

Received : August 2017

Accepted : April 2020

Published : April 2020

### Keywords

*Cycling is fun;  
learning motivation;  
learning video;  
special education;  
student with special need*

### Abstrak

Tujuan penelitian ini adalah mengevaluasi penggunaan media video pembelajaran bertema *cycling is fun* pada aktivitas belajar siswa kelas XII-B SLB Negeri Semarang. Penelitian menggunakan metode deskriptif-kuantitatif dan melibatkan enam siswa tunarungu melalui observasi, tes, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa media video pembelajaran tema *cycling is fun* mampu (1) menciptakan suasana belajar kondusif sebesar 88%, (2) memotivasi belajar siswa sebesar 96%, (3) membangun kedisiplinan siswa mencapai 95%, (4) mendorong keaktifan belajar siswa mencapai 85%, dan (5) memengaruhi rata-rata nilai hasil belajar siswa dengan skor 84,43. Aktivitas belajar siswa terlihat sangat baik dan mereka mampu mencapai standar ketuntasan hasil belajar. Dengan demikian dapat disimpulkan bahwa penggunaan media video pembelajaran tema *cycling is fun* sangat baik digunakan untuk pembelajaran Bahasa Inggris oleh siswa tunarungu.

### Abstract

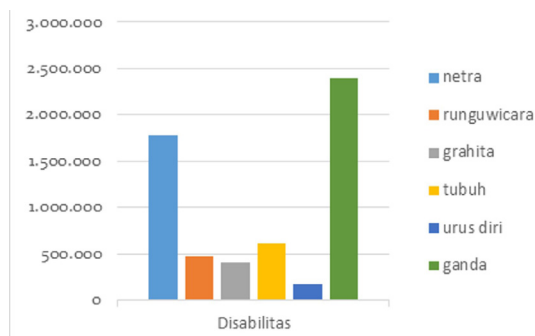
*This study aims to evaluate the implementation of learning video entitled Cycling is Fun on learning practice of students grade XII-B of public special education in Semarang. The research uses quantitative descriptive analysis by involving six deaf special need students through observation, testing, interview and document search. The research result shown that the learning video could (1) create a conducive learning atmosphere of 88%, (2) motivate the students' motivation of 96%, (3) build a students' discipline reached 95%, (4) encourage students' activeness reached 85%, and (5) affect the average of students' learning outcomes with a score of 84.43. Student learning activities look very good and they are able to reach the learning outcome standard. Thus, it can be concluded that the use of the learning video with the title Cycling is Fun is very well used to learn English subject for student with deaf special need.*

✉ Corresponding author :  
Address: : Jl. Raya Rum – Tidore, Kota Tidore Kepulauan,  
Maluku Utara, Indonesia  
E-mail: [khoerulu64@gmail.com](mailto:khoerulu64@gmail.com)

## INTRODUCTION

Everybody needs education to actualize him/herself as a growing and developing human being based on talents and interests, and people with special needs are no exception. As stated in the Law No. 20 of 2003 on National Education System article 5 paragraph 2, citizens with physical, emotional, mental, intellectual, and/or social disorder are rightful to obtain special education (Pemerintah Republik Indonesia, 2003). Thus, each person has the right to optimize his/her talent and competence.

In Fathoni (2018), based on the national social and economic survey by the Central Bureau of Statistics year 2012, there are 6.008.661 people with special needs in Indonesia. This immense number consists of 1.780.200 blind, 472.855 deaf, 402.817 mentally disabled people, 616.387 people with body disability, 170.120 incapacities, and 2.401.592 people with double disability.



**Figure 1** Survey of People with Disability in Indonesia (2012)

The survey results indicated the need for advanced attention for kids with special needs as they belong to the nation's successor who have precious potential that should be developed properly through education. Related to this issue UNESCO has initiated a global movement so-called the Education for All (EFA) aiming at fulfilling the learning needs of kids, teens, and adults (Goldstein, 2004; Unesco, 2015a). The term "all" in "Education for All" means all people, adult-young, rich-poor, normal-disability, and so on should get high qualified educational services starting from primary to advanced education. It also refers to all institutions either government or private. They have to collaborate to maintain the education process, because education is one of the basic human rights (Tomasevski, 2004).

Based on the description of EFA, kids with special needs are also included as the subject of

EFA, who demand inclusive education. The notion of the EFA has to be encouraged to achieve the success of educational services where all people, adult-young, rich-poor, normal-disability, have the same access and get a suitable educational services based on their own need (Mulyadi, 2017; Unesco, 2015b, 2019). Moreover, providing inclusive education surely requires various strategies and regulations. The establishment of inclusive schools and special schools are among the efforts that have been made by the government all this time (Hajar & Mulyani, 2017; Kementerian Pendidikan dan Kebudayaan, 2016; Pratiwi, 2015).

Furthermore, the rapid development in technology has to be taken into account related to this issue. One particular field of studies that have a big role in developing learning devices and the theories related to it is educational technology (Januszewski & Molenda, 2008; Subkhan, 2016). Fundamentally, conventional learning should be directed to the non-conventional one to make it more attractive and stimulate students' motivation using technology assistance. Many recent technological advancements enable students to manage their own learning pace in instructional media in the form of printed media, photos, video, film, animation, and many more. Therefore, the role of learning media in this era of non-conventional learning is an integral part of the education system (Lorenz, Kikkas, & Laanpere, 2014; Seels & Richey, 1994; Selwyn, 2011a, 2011b; Sharma, 2019).

Learning media denotes an essential function in an effective education process for children with special needs. Take a good example from the video learning media which is a potential media for the deaf. According to Kustiono (2010), learning media are tools, both hardware or software as a communication tool to that make any effort of the teacher to explain the subjects for the children more clearly. Moreover, it also expedites teacher-student communication during learning; besides, it stimulates attention, motivation, and curiosity in a certain topic. Furthermore, Ibrahim et al. (2000) also explained that learning media is everything that convey a message to encourage attention, interest, thought, and feeling of students to accomplish a particular learning objective.

Moreover, this research focuses on deaf children. Generally, their intelligence is almost the same with normal kids, yet functionally, their development is influenced by language, information limitation, and abstraction. Kosasih

(2012) elucidated that the language aspect is indeed the main obstacle for their growth which affects the difficulties in accepting sound stimulus and leads to the inability to produce sound. Essentially, language mastery of deaf people can be known from their vocabulary that could be the basis for the assessment of the knowledge, intelligence level, and private experience (Rachman cited in Rohman & Wagino, 2013).

Referring to Dodge and Colker (cited in Parwoto, 2007) computers provide diverse effective learning supports for children with special needs. This is in line with a statement that the use of audiovisual media for kids with special needs is beneficial for them to get to know the content of the subjects better (Parwoto, 2007). Similarly, Dwyer (cited in Ibrahim et al., 2000) revealed that video could take 94% of the process of transferring information through eyes and ears, and could make people remember 50% of what they have seen and heard. The messages conveyed could also influence a strong emotion which boosts the achievement of learning objectives.

A special school is an education unit for students with special needs from primary to secondary level. In its implementation, special schools are specified based on students' disorders, like blind, deaf, speech impaired, autism, mentally-disabled, learning disorder, and others (Cook & Schirmer, 2003; Mazurek & Winzer, 2002). There are numerous learning strategies and media for children with special needs which is adjusted to the children's condition. Surely, the selection of the strategies and learning media focuses on the utilization of non-disabled senses to overcome the lost function of other senses. For instance, blind children use audio like CD/cassette, radio, bandongan, and drill as they assist children without the sight sense. Further, deaf children use demonstration strategy by optimizing the sight sense in receiving information for them to grasp the conveyed information.

Several reviews regarding the use of learning media in special schools revealed a variety of results. Zakia et al. (2016) showed a fact that the lack of learning facilities including learning media mainly in natural science learning. For that reason, efforts have been made to facilitate learning in special schools such as the development of digital animation technology-based media (Alfikri & Ahsyar, 2017; Beni A., Gita, & Suarsana, 2017; Nurfadilah & Nurhastuti, 2018; S.R. & Susetyo, 2016; Salim, 2016; Setyawan, Tol-

le, & Kharisma, 2018), or modest learning media (Yuliansyah, 2018). The reviews try to contribute to the development of media beneficial for the education of children with special needs. On the other hand, the government has officially established similar learning media, particularly at the Balai Pengembangan Media Televisi Pendidikan (BPMTP)/Center of Education Television Media Development.

BPMTP has produced instructional videos for deaf children as an innovation to help teachers in conducting classroom learning to create various environments that could attract their learning interest. The developed learning media is indeed useful for learning practice, but no review or study is done. One of the produced media is an instructional video entitled "Cycling is Fun". For that reason, this article tries to describe the use of the learning media in one of the special schools in Semarang, whether it is effective or not. As early information, this study's research site has not made use of instructional video for deaf students in the English course, at least up to the time the research was about to perform.

## METHOD

This study employed a descriptive qualitative approach. Descriptive research aiming at investigating a phenomenon and condition that the results are described in the form of a research report (Arikunto, 2013). The objective of the research is to illustrate a systematic, factual, and accurate description of facts, characteristics, and the relationship between the studied phenomena (Nazir, 2005). This research focuses on deaf students of Public Special School, Semarang grade XII. The research variable included activities and student research results in using instructional video on the "Cycling is Fun" theme. There are six students involved in this research.

The data were gathered through observation, interviews, tests, and documentation. A non-participant observation method was used, in which the researchers did not take part directly on the observed object, but acted as an independent observer. The researchers employed observation sheets with a Likert scale to know the classroom learning activities. In addition to observation, the researchers gathered information using a structured interview by asking several questions to the teacher regarding the use of the learning media.

The objective test with the post-test de-

sign was conducted to reveal the students' learning outcomes. Before that, a construct validity test was done, precisely after the instrument has been constructed. The measured aspects and theories used were determined then consulted with experts (Sugiyono, 2010). Besides, the test instrument has been passed the validity and reliability test by BPMTP. The video has been disseminated throughout Indonesia; thus, it has been declared reliable to be used by anyone at anytime and anywhere.

The data were analyzed descriptively, hence, this research does not formulate a hypothesis as it is an explorative-descriptive one (Sugiyono, 2010). The analysis was done on the observation of learning activities and test results, while the descriptive analysis with the percentage technique used the following equation:

$$P = \frac{\text{Total score}}{\text{Number of item}} \times 100$$

Information:

P	=	Percentage
total score	=	The score of activities
number of item	=	The maximum score of activities
100	=	Percentage %
5	=	Median

There are four indicators of the learning activities consisting of (1) learning atmosphere with five sub-indicators; (2) motivation with five sub-indicators; (3) discipline with four sub-indicators; and (4) student liveliness with four sub-indicators. The total score of each indicator was accumulated based on the criteria of learning activities, which are represented in the following table.

**Table 1** The Criteria of Student Learning Activities (cited from Arikunto & Jabar, 2004)

Percentage	Criteria
81% - 100 %	Very good
61% - 80%	Good
41% - 60%	Fair
21% - 40 %	Poor
0% - 20%	Very poor

The student is succeeded if s/he could complete and master the competencies by obtaining the score of minimum completeness score of 75. The classical proportion of student completeness is achieved when 85% of the students passed the minimum score (Mulyasa, 2006).

## RESULT AND DISCUSSION

This chapter consist of two sections (1) the evaluation of the student learning activities in using the instructional video on the theme of cycling is fun, and (2) the evaluation of the student learning outcomes. The explanation of each section is as follows.

### A. Learning Activities

The data gathered from the observations were in the form of a checklist filled by the researchers to determine student learning activities, then processed using the percentage description technique. The purpose of the data processing is to give meaning and explanation to the data. Each indicator of the student activities is tabulated using the data analysis technique to draw up the conclusion. Besides, the tabulation aims at easing the analysis of the research results.



**Figure 1** The Learning Atmosphere Using 'Cycling is Fun' Instructional Video

This study specifically observed the learning process using video learning in English subjects. The video is specifically designed for deaf children, the actor in the videos is also deaf children so that the sign language is used. At the end of each segment, the teachers gave re-explanation to the students using sign language so that it is better understood by the students.

Generally, based on the observations and interviews, the imitating method was also used by the teacher so that the materials can be received by the students appropriately, given all the limitations on deaf children. They dominantly use the sight sense to grasp information. Furthermore, the score of each indicator was obtained by the researchers through observation on student learning activities. The observational results were quantified and there were several discerned





**Figure 2** Student Learning Activities Using a Video on 'Cycling is Fun' Theme

indicators including (1) learning atmosphere; (2) learning motivation; (3) discipline/order in learning; and (4) student liveliness.

Referring to the observational results, the students were seen to pay close attention to the video (score 5). They also enjoyed the video as expressed in their behavior and expression while trying to understand the materials by imitating it (score 5). All students smiled a lot and occasionally laughed at the clip which showed their happiness in watching the video (score 5). However, with all the limitations of the deaf children, there were seen some students lagging several times while trying to follow the instructions (score 3). The researchers also saw a student who did not respond and pay attention to the instruction, s/he only silent when other students seemed enthusiastic to pay attention and try to imitate what appeared on the show. Based on these findings, it can be said that the use of instructional video on the theme of 'cycling is fun' on deaf students is very good for creating a conducive learning atmosphere with a percentage of 88%.

The finding related the student motivation, there was one sub-indicator categorized as 'good' and four sub-indicators categorized as 'excellent'. Based on the observation, all students showed responsibility proven by their participation in learning (score 5). The students gave feedback to the teacher's instruction and left only one less-responsive student (score 4). The students also seemed to respond to the video and listened to it well, shown by them following the instructions appearing in the video (score 5). These results indicated that the use of instructional video on 'cycling is fun' theme for deaf children is advantageous to motivate them following the learning process by 96%.

Moreover, there was 1 sub-indicator classified as 'good' and three sub-indicators classified



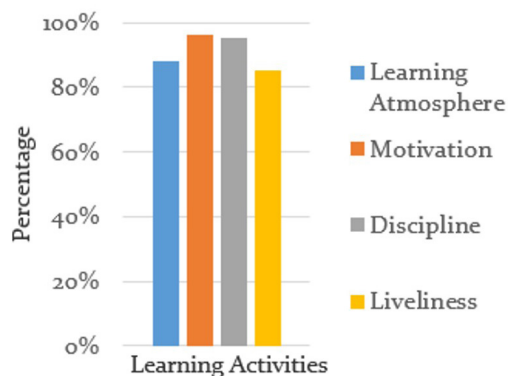
**Figure 3** The Students Concentrating on the Video

as 'very good' in the discipline indicator. Based on the observation, all learners completed watching the video (Score 5). Moreover, all students concentrated on watching the video (score 4), also, did the assignment well according to their abilities (score 5). Finally, all students orderly followed the learning process from beginning to end in a conducive atmosphere (score 5). The recapitulation results stated that the discipline of the students was very good with a percentage of 95%.

The fourth indicator was the liveliness, in which the finding were three sub-indicators classified as 'good' and another one sub-indicator is categorized as 'very good'. The students' participation in asking the question was very good (score 5). The use of an instructional video is indeed intended to direct the students' participation i.e. in asking a question about the materials being studied or difficulties they faced in comprehending the questions. Further, the students were also seen to cooperate with their classmates in understanding the materials (score 4); besides, most of them consulted with their dictionary though a few of them did not bring any (score 4). Amid the teacher explanation, the students were asked to do peer-discussion, yet it did not work very well since most of them were confused about what they should do during the discussion (score 4). In the end, their liveliness was favorable with a percentage of 85%.

The following (figure 4) is the recapitulation of the learning activities on the theme of 'Cycling is Fun'.

Based on the data obtained from the observation, the instructional video could lift the learning atmosphere resulting in attractive and active learning. However, the biggest contribution of the video is encouraging the students' learning motivation and discipline. The less favored



**Figure 4** The Recapitulation of Learning Activities

indicator was the liveliness. This is understandable as student liveliness does not only depend on the learning media only but also other factors such as learning approach and method. If the learning method focuses on the content, then it is no surprise when the students are less active. Therefore, both media and methods have to be conformable to one and another by considering the learning objective and materials (Smith & Ragan, 2005; Subkhan, 2016).

## B. Learning Result

After the students completing the learning process, they were directed to have a test about the learned materials from the video. In this case, the researchers succeeded in collecting the test results of six students. The test was done to know the student learning results which were then processed in the form of a table and description of the average class score.

The tested materials were those taught in the video summed up in 21 items. Task I was about the sports in English, Task II was about the reason of loving cycling, task III was about the right way to treat a bicycle, and task IV was about how to ride a bicycle. The recapitulation of the student research results showed that the lowest score was 80 and the highest was 90.

The overall results indicated that the instructional video on 'Cycling is Fun' theme is very impressive to create a conducive learning atmosphere resulting in an optimum material understanding and satisfying learning results. The benchmark of the learning mastery was when the students reached the minimum completeness score of 75, and 85% of the total of the students got >75. Moreover, 84.43% of the students could answer the questions correctly. By



**Figure 5** The The Students Working on the Test

having the average score passing the minimum completeness, the students were successfully achieved the learning mastery.

## CONCLUSION

The evaluation of the use of instructional video on 'Cycling is Fun' theme in XII-B students of SLB N Semarang can be concluded that (1) the instructional video could create a conducive learning process, facilitate teacher-student communication which assists the teacher in conveying materials by giving a concrete example on the video; and (2) the classroom learning activities run very well, proven by the students' enthusiasm in following the learning process. However, improvements are in the air. The selection of learning media should be more considerate by looking at the learning objectives, materials, student characteristics, and social context of learning (Subkhan, 2016).

## REFERENCES

- Alfikri, I., & Ahsyar, T. K. (2017). Media Pembelajaran Interaktif Seni Origami Berbasis Animasi untuk Anak Tunagrahita Sedang. *Jurnal Ilmiah Rekayasa dan Manajemen Sistem Informasi*, 3(2), 50–60.
- Arikunto, S. (2013). *Prosedur Penelitian*. Jakarta: Rineka Cipta.
- Arikunto, S., & Jabar. (2004). *Evaluasi Program Pendidikan*. Jakarta: Bumi Aksara.
- Beni A., K., Gita, I. N., & Suarsana, I. M. (2017). Media Pembelajaran Matematika Interaktif untuk Siswa Tunarungu: Perancangan dan Validasi. *Prosiding Seminar Nasional Pendidikan Teknik Informatika (SENAPATI) ke-8*, 16–22.
- Cook, B. G., & Schirmer, B. R. (2003). What is Special About Special Education? Overview and Analysis. *The Journal of Special Education*, 37(3),

- 200-205.
- Fathoni, M. I. (2018). *Pasar Tenaga Kerja dan Penyandang Disabilitas*. Retrieved April 24, 2020, from Geotimes.co.id website: <https://geotimes.co.id/opini/pasar-tenaga-kerja-dan-penyandang-disabilitas/>
- Goldstein, H. (2004). Education for All: the globalization. *Comparative Education*, 40(1), 7-14.
- Hajar, S., & Mulyani, M. S. R. (2017). Analisis Kajian Teoretis Perbedaan, Persamaan dan Inklusi dalam Pelayanan Pendidikan Dasar bagi Anak Berkebutuhan Khusus (ABK). *Jurnal Ilmiah Mitra Swara Ganesha*, 4(2), 37-48.
- Ibrahim, H., Sihkabuden, S., & Kustiawan, U. (2000). *Media Pembelajaran*. Malang: Fakultas Ilmu Pendidikan Universitas Negeri Malang.
- Januszewski, A., & Molenda, M. (Eds.). (2008). *Educational Technology: A Definition with Commentary*. New York: Taylor & Francis Group.
- Kementerian Pendidikan dan Kebudayaan. (2016). *Gambaran Sekolah Inklusif di Indonesia: Tinjauan Sekolah Menengah Pertama*. Jakarta: Kementerian Pendidikan dan Kebudayaan, Pusat Data dan Statistik Pendidikan dan Kebudayaan.
- Kosasih, E. (2012). *Cara Bijak Memahami Anak Berkebutuhan Khusus*. Bandung: Yrama Widya.
- Kustiono. (2010). *Media Pembelajaran*. Semarang: UNNES Press.
- Lorenz, B., Kikkas, K., & Laanpere, M. (2014). The Role of Educational Technologist in Implementing New Technologies at School. In P. Zaphiris & A. Ioannou (Eds.), *Learning and Collaboration Technologies. Technology-Rich Environments for Learning and Collaboration (LCT 2014)*. Springer, Cham.
- Mazurek, K., & Winzer, M. A. (Eds.). (2002). *Special Education in the 21<sup>st</sup> Century: Issues of Inclusion and Reform*. Washington, DC: Gallaudet University Press.
- Mulyadi, A. W. E. (2017). Policy of Inclusive Education for Education for All in Indonesia. *Policy & Governance Review*, 1(3), 201-212.
- Mulyasa, E. (2006). *Kurikulum Tingkat Satuan Pendidikan*. Bandung: Remaja Rosdakarya.
- Nazir, M. (2005). *Metode Penelitian*. Bandung: Ghalia Indonesia.
- Nurfadilah, N., & Nurhastuti, N. (2018). Media Pembelajaran Video Komunikasi Total untuk Meningkatkan Penguasaan Kosakata Anak Tunarungu. *Jurnal Penelitian Pendidikan Khusus*, 6(2), 230-237.
- Parwoto. (2007). *Strategi Pembelajaran Anak Berkebutuhan Khusus*. Jakarta: Departemen Pendidikan Nasional.
- Pemerintah Republik Indonesia. (2003). *Undang-Undang No. 20 Tahun 2003 tentang Sistem Pendidikan Nasional*. Jakarta.
- Pratiwi, J. C. (2015). Sekolah Inklusi untuk Anak Berkebutuhan Khusus: Tanggapan terhadap Tantangan Kedepannya. *Meretas Sukses Publikasi Ilmiah Bidang Pendidikan Jurnal Bereputasi*, 237-242.
- Rohman, F., & Wagino. (2013). Permainan Susun Kata terhadap Peningkatan Perbendaharaan Kata Anak Tunarungu. *Jurnal Pendidikan Khusus*, 2(2). Retrieved from <http://jurnalmahasiswa.unesa.ac.id/index.php/jurnal-pendidikan-khusus/article/view/2871>
- S.R., W. E., & Susetyo, B. (2016). Perbandingan Media Kartu Gambar dengan Rosetta Stone dalam Meningkatkan Perbendaharaan Kosakata Bahasa Inggris Anak Tunarungu. *Jassi\_Anakku*, 18(2), 1-5.
- Salim, A. (2016). Pembelajaran Matematika Berbasis Komputer dengan Metode Multikomunikasi untuk Siswa Kelas IV SDLB-B. *Jurnal Informatika*, 3(1), 9-21.
- Seels, B. B., & Richey, R. C. (1994). *Instructional Technology: The Definition and Domains of the Field*. Washington, DC: Association for Educational Communication and Technology.
- Selwyn, N. (2011a). *Education and Technology: Key Issues and Debates*. London & New York: Continuum.
- Selwyn, N. (2011b). *School and Schooling in the Digital Age: a critical analysis*. London & New York: Routledge.
- Setyawan, D. I., Tolle, H., & Kharisma, A. P. (2018). Perancangan Aplikasi Communication Board Berbasis Android Tablet sebagai Media Pembelajaran dan Komunikasi Bagi Anak Tunarungu. *Jurnal Pengembangan Teknologi Informatika dan Ilmu Komputer*, 2(8), 2933-2943.
- Sharma, P. (2019). Digital Revolution of Education 4.0. *International Journal of Engineering and Advanced Technology (IJEAT)*, 9(2), 3558-3564. <https://doi.org/10.35940/ijeat.A1293.129219>
- Smith, P. L., & Ragan, T. J. (2005). *Instructional Design* (3<sup>rd</sup> ed.). Wiley & Sons.
- Subkhan, E. (2016). *Sejarah & Paradigma Teknologi Pendidikan untuk Perubahan Sosial*. Jakarta: Prenada Media Group.
- Sugiyono. (2010). *Metode Penelitian Pendidikan*. Bandung: Alfabeta.
- Tomasevski, K. (2004). *Manual on Right-based Education: global human right requirements made simple*. Bangkok, Thailand: Unesco.
- Unesco. (2015a). *Education for All 2000-2015: Achievements and Challenges*. Paris: Unesco Publishing.
- Unesco. (2015b). *The Right to Education for Persons with Disabilities: Overview of the Measures Supporting the Right to Education for Persons with Disabilities reported on by Member States. From Exclusion to Empowerment: Role of ICTs for Persons with Disabilities*. Paris: Unesco Publishing.
- Unesco. (2019). *The Right to Education for Persons with Disabilities*. Paris: Unesco Publishing.
- Yuliansyah. (2018). Penggunaan Metode Abjad Jari dan Bahasa Tubuh serta Media Pembelajaran dalam Pembelajaran PAI bagi Anak Berkebutuhan Khusus Tunarungu di SLB Negeri Musi

- Rawas. *Al-Bahtsu*, 3(1), 73-91.
- Zakia, D. L., Sunardi, & Yamtinah, S. (2016). Pemilihan dan Penggunaan Media dalam Pembelajaran IPA Siswa Tunarungu Kelas XI di Kabupaten Sukoharjo. *Jurnal Sainsmat*, 5(1), 23-29.