

## Needs Assessment for Developing Animation Video in Communication Learning

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**Abstract:** *In today's digital era, the development of the world of education has increased quite rapidly since it can facilitate learning wherever and whenever, according to student needs. Such as the presence of various alternative media to facilitate the learning process; one is an animated video, which can be used to effectively and efficiently fulfill learning needs. Several studies have revealed that animated videos play a significant role in increasing student learning outcomes. Because the animated video can make students appear as if they are faced with a real situation, it can strengthen their understanding of the material conveyed. This quantitative descriptive research used a survey method carried out in August-September 2022. From the research, it can be concluded that animated videos are highly needed in the Introduction to Communication Course. Students need learning media to accommodate their learning needs and be used anywhere and anytime. Animated videos are also required because students feel the learning media can increase their motivation.*

**Keywords:** *Animation Video, Learning, Need Assessment*

**Abstrak:** *Di era digital saat ini, perkembangan dunia pendidikan mendapatkan peningkatan yang cukup pesat karena dapat mempermudah pembelajaran dimanapun dan kapanpun sesuai kebutuhan mahasiswa, seperti hadirnya berbagai macam media alternatif untuk mempermudah proses pembelajaran, salah satunya adalah video animasi yang dapat dijadikan sebagai alat pemenuhan kebutuhan pembelajaran yang efektif dan efisien. Dalam beberapa penelitian telah disebutkan bahwa video animasi memberikan peran yang signifikan terhadap hasil belajar mahasiswa yang memberikan peningkatan hasil belajar karena dapat video animasi tersebut mahasiswa seolah-olah dihadapkan pada situasi sebenarnya sehingga dapat memperkuat pemahaman siswa mengenai materi yang sedang disampaikan. Penelitian ini merupakan penelitian deskriptif kuantitatif dengan metode survei yang dilaksanakan pada bulan Agustus – September 2022. Kesimpulan dari penelitian yang dilakukan, bahwa video animasi sangat dibutuhkan dalam pembelajaran pada mata kuliah pengantar komunikasi. Mahasiswa membutuhkan media pembelajaran yang bisa mengakomodir kebutuhan belajar mereka serta bisa digunakan dimanapun dan kapanpun. Video animasi diperlukan karena mahasiswa merasa bahwa media pembelajaran tersebut bisa meningkatkan motivasi mereka dalam belajar.*

**Kata Kunci:** *Video Animasi, Pembelajaran, Analisis Kebutuhan*

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## INTRODUCTION

**D**igital-based education is a renewal in welcoming education 4.0, which integrates cyber technology. This education aims to prepare creative human resources per the demands of changing times (Efendi, 2019; Setiana, 2020). One current learning revolution process result is using animation as a learning aid medium. Its advantages include improving understanding of imagination, visual, auditory, and kinesthetic (Nurnazarudin et al., 2020; Rahma, 2021). They incorporate media elements in this animation in audio, text, video, image, graphics, and sound into a unified presentation.

In the current era of digitalization, many changes have occurred due to technological developments (Mulyanto & Kudratullah, 2019; Sutikno, 2020). Hence, since it becomes a challenge for the world of education, the lecturer must also be able to keep up with this era. Teachers can use digital literacy in the learning process and use digital learning media to increase student motivation and learning outcomes (Nazar et al., 2020; Siti Rodi'ah, 2021).

Learning media is a teaching aid in conveying a learning material, so students can easily understand the material presented (Kurniasih et al., 2020; Rahman, 2021). Students' knowledge is also impacted by the choice of media used throughout the learning process (Fatria & Nasution, 2020; Hikmiah, 2021). For the media used for learning to change with the times, the teacher must be able to select the media for use in the teaching and learning process.

Moreover, in this era of digitalization, many media can be used as tools for learning (Innuddin et al., 2021; Sari & Hasibuan, 2019). One of them is animation. Animation is an image of objects arranged orderly following a predetermined movement in each time increment. Learning using animation can be a solution for educators, so students can more easily accept the information conveyed. Thus, it can be used as a medium for learning. Given that animation as a learning medium must be under the objectives or learning outcomes to be achieved (Astuti et al., 2021; Fathin et al., 2021), it is hoped that animation can be used effectively and significantly.

Various alternative media to facilitate the learning process are available, in this case, animated videos. They can be used as a tool for meeting effective learning needs and efficient learning, accelerating the development of the educational sector in the current digital era quite significantly. Animated videos also significantly influence student learning outcomes (Candra Dewi & Negara, 2021; Masdafni, 2020). Animated videos make students feel they are faced with real situations to strengthen their understanding of the material.

As stated, animation is a moving image that can explain something easily to achieve a learning goal. Animation may be a teaching tool because it can grab students' attention and make learning entertaining rather than boring. In addition, animation can increase student motivation in learning (Samosiri et al., 2021; Sena, 2019) to have a strong drive and determination to achieve the desired learning outcomes, which motivation will grow based on the teacher's creativity in making instructional media. Therefore, creative and appropriate animation may significantly affect student learning outcomes through the function of animation as a learning medium that facilitates the process of delivering teacher messages to students (Umamah et al., 2020; Zaini & Nugraha, 2020). In making animation, it must be under the learning objectives so that animation can effectively facilitate giving pictures or illustrations to students. The animation must be well constructed because it is an instructional aid where the desired result depends on its use and is made according to student learning needs. Further, good animation can support students in forming a picture of the processes that occur but still requires learning effort to hone students' cognitive thinking skills.

With animated videos, learning material can be conveyed textually via audio and visually by programming the material to build an emotional connection between students and the material they are studying. Besides, animated videos provide benefits in creating a livelier and more memorable classroom atmosphere with clearer and more attractive visualizations. The characteristics of animated videos are that they are flexible, making it easier for users because they can be played anywhere and anytime according to student needs. Animation also has several advantages for learning, making it deserving of usage as a learning medium for all subjects (Bongers et al., 2020; Wahyuni et al., 2021). It is theoretical and practical through interesting and fun visualization since all ages of students can reach it due to its flexibility and power to compete in the digital era.

Furthermore, the swift development of technology has made people aware of the importance of mastering technology at this time. Individuals can also feel the presence of technology in the world of education, such as the application of learning that uses technology as a tool used in learning. In this regard, interesting and innovative learning requires learning media that can help students learn. Therefore, a teacher must be able to develop interesting and fun learning media by utilizing current technology. One is making animated videos to support student learning at school (Mardanti & Abadi, 2021; Rosyidah et al., 2021).

In contrast, monotonous learning with less varied learning media makes students experience boredom in the learning process (Putra, 2021; Tahrir et al., 2021). Hence, the existence of learning using animated media is an effort to increase students' interest in the learning process. Based on various studies and research articles regarding the effectiveness of using animation in learning, it gives positive results. Using animated media in learning is a step to enable students to capture learning material well. Also, impressions or moving displays are engaging instructional tools that help students recall and assimilate the lesson. Such teaching materials are simple for the students to grasp.

The use of animation in learning with a positive impact is also inseparable from the role of educators or teachers to package learning material with depictions through animation. The aim is for the material or message to be well received by students. Using animation in learning is also one of the improvements in the quality of education in Indonesia by utilizing existing technological developments. Students' interest in learning will be easily stimulated if the learning media uses animation (Hamidiyah et al., 2021; Ho et al., 2019). Animated learning materials can help students grasp the subject and address their requirements. Animation learning media is further considered more realistic, immersive, and interactive when learning activities occur. Thus, educators can create animated learning media by following developing trends in the world of education, creating content in a sequence, clearly, and interestingly.

Meanwhile, convoluted animated content will make students confused about understanding the material. Therefore, before creating content, educators must convey some material to be used as a provision for students to understand the content created by educators. It is also critical that students comprehend the animated content in this regard. Then, students' learning outcomes are assessed as better when using animated learning resources (Chen et al., 2019; Qorinasari, 2020). The performance of students who did not use animated learning material differs significantly from those who did. However, some obstacles related to the use of animated learning media in the learning process include the lack of competence of educators when designing and creating effective animated content. Hence, the material contents are limited and not easily understood by students.

In the current era, the selection of fun learning media is the main key to student's motivation in learning (Hanifah, 2021; Harahap & Siregar, 2020). In conventional classes, teachers who only use

textbooks make students passive, bored, and not even motivated to learn. An example is the digestive system's material, which is difficult to observe and cannot be seen directly. If students are only given pictures or written explanations, they will only imagine or not even remember it. Conversely, if teachers use animation in the lesson, its visualization can make students understand well every detail that occurs in the digestive process. In this way, learning objectives can be achieved properly. Consequently, animation in learning videos keeps them motivated and enjoyed, makes the learning atmosphere more interesting, increases focus, and many other positive things.

In this case, the Introduction to Communication Course is one of the subjects that the Educational Technology Study Program students at Universitas Negeri Surabaya must take. This course is mandatory for undergraduate students. Nevertheless, the problem is that students had difficulty understanding its material, especially material on communication principles. Therefore, an in-depth research is needed about what students need in learning activities to understand learning material easily. In fact, learning should accommodate students' needs (Astuti et al., 2021; Hutagalung et al., 2019) to make students meet their learning needs.

Further, in the present era, the use of technology is growing rapidly (S. Aji et al., 2020; Gozali & Lumaris, 2020). This technology's development impacts all fields (Aminah et al., 2020; Hardilawati et al., 2019). The development of this technology also makes a very high contribution to the field of education, one of which is by helping to facilitate the teaching and learning process in the education sector. Because the existence of education can educate a nation by forming a better generation, the quality of education and human resources of a country is determinants of the progress of the nation (Almasitoh & Nugrahaningsih, 2021; Elvira, 2021). Therefore, education is vital and must be seen as a need everyone must possess. It is where technology can be utilized within it. The learning process will take place effectively and efficiently when accompanied by learning media (Elvira, 2021; Fauziah, 2021). As a result, the teaching and learning process will be more engaging, and student's participation in the learning process will increase.

## RESEARCH METHODS

This quantitative descriptive research with a survey method was conducted in August-September 2022. The three main methods of gathering data were observation, interviewing, and documenting. The observation sheet was used as the data collecting tool to obtain data about the Introduction to Communication Course in the Education Technology Study Program, Universitas Negeri Surabaya. The research data obtained were then analyzed and translated to become the basis for developing animated videos in learning.

The subjects in this study were 112 students of the Educational Technology Study Program taking an Introduction to Communication Course. Then, data collection techniques were carried out through surveys using Google Form questionnaires and structured interviews. The instrument used included a preliminary study questionnaire. The descriptive qualitative data analysis approach was then applied by examining and condensing the data gathered to give an overview of the settings and events that occurred in the field.

## RESULTS AND DISCUSSION

### Results

Of the 112 students, 86.99% said they needed animated videos in teaching and learning activities in the Introduction to Communication Course. It could be seen from the questionnaire results that students wanted to learn to use animated videos. Due to their audio, visuals, and animated characters, animated videos make learning more interesting (Kurniawan et al., 2022; Prilosadoso et al., 2021). Animated videos can also be played repeatedly if students still do not understand the learning media material. In addition, students expected each material in the learning media course to be added with animated videos to make it easier for them in their learning activities. Further, students hoped that innovation and learning directions in the future would include animated videos so they feel comfortable carrying out learning activities.

The data processed by the researchers were based on research subjects from students in the course, totaling 112 students. Researchers researched by making a questionnaire to distribute to students. Students filled out the questionnaire without any intervention from the researchers. The data obtained by researchers are described below.

Most students (89.28%) stated that the learning process in class was quite good. However, lecturers still used presentation slides to provide material to students. Also, students only passively listened to the lecturer's explanation during the learning process. Related to this, one-way learning can cause learning to be boring and make students passive in participating in learning. In fact, good learning is learning that can increase enthusiasm for learning (Choiriyah & Fikri, 2021; Xu et al., 2021). Learning with a high enthusiasm will make learning better and greatly impact the course of the learning process.

Students (84.82%) also admitted that lecturers delivering learning materials in class used simple media and tended to be normative. The learning media used by lecturers was the form of presentation slides widely used in learning activities. In actual fact, students are enthusiastic if there is an interaction between learning media and students consistently and continuously. Interesting learning media and interactivity can be one way to keep students from getting bored in lectures. Interesting learning media can make students more focused on learning (G. P. Aji et al., 2018; Aziz et al., 2019).

Additionally, students (85.71%) stated that learning in Introduction to Communication Course was difficult to understand. The difficulty of the material mastered by students was because the learning model could not make students active and enthusiastic in learning activities. Here, selecting student-centered learning models will improve their understanding of the learning material. In addition, students need a form of learning that can be done anywhere and anytime (Andayani et al., 2021; Hariati et al., 2022)

Students (87.50%) explained they wanted to implement the Introduction to Communication Course learning using animated videos. It was taken from the results of the questionnaire distributed to students. Students believed watching animated movies motivated them to learn more (Dhida, 2021; Rosita et al., 2021). Additionally, it was believed that animated educational videos could be used anytime and anywhere in the current era of information exposure and all-digital. It is what made students interested in learning independently with animated videos.

Moreover, students (89.28%) said that learning in Introduction to Communication Course using animated videos could make it easier for them to study anytime and anywhere. In this regard, learning in the era of Society 5.0 is free in carrying out learning activities. This freedom can be accommodated by providing animated videos in learning activities. Studying anywhere and anytime made students feel

comfortable, making learning activities more meaningful. With today's developing technology, it is not impossible that learning can be done anytime and anywhere. Learning activities carried out anytime and anywhere can increase the effectiveness of learning (Lily & Kamase, 2021; Megasari et al., 2021).

Students (85.71%) also revealed that learning using animated videos could further increase enthusiasm and motivation for students in the learning activities. The selection of learning media lecturers can also cause high learning motivation use. Learning activities cannot be separated from student motivation, interesting learning media, and comfort in teaching and learning activities. In this case, animated videos can increase enthusiasm and motivation (Prameswari & Ummah, 2022; Rosita et al., 2021).

At last, students (86.61%) admitted that learning using animated videos allowed them to study independently. Learning animation can foster learning independence in students. Learning independence in students must be grown so they do not depend on others. In this regard, good learning can make students independent (Agustin & Handayani, 2021; Bilda & Fadillah, 2020). With independent study, students will gain knowledge that will enter into long-term memory and will always be imprinted on students.

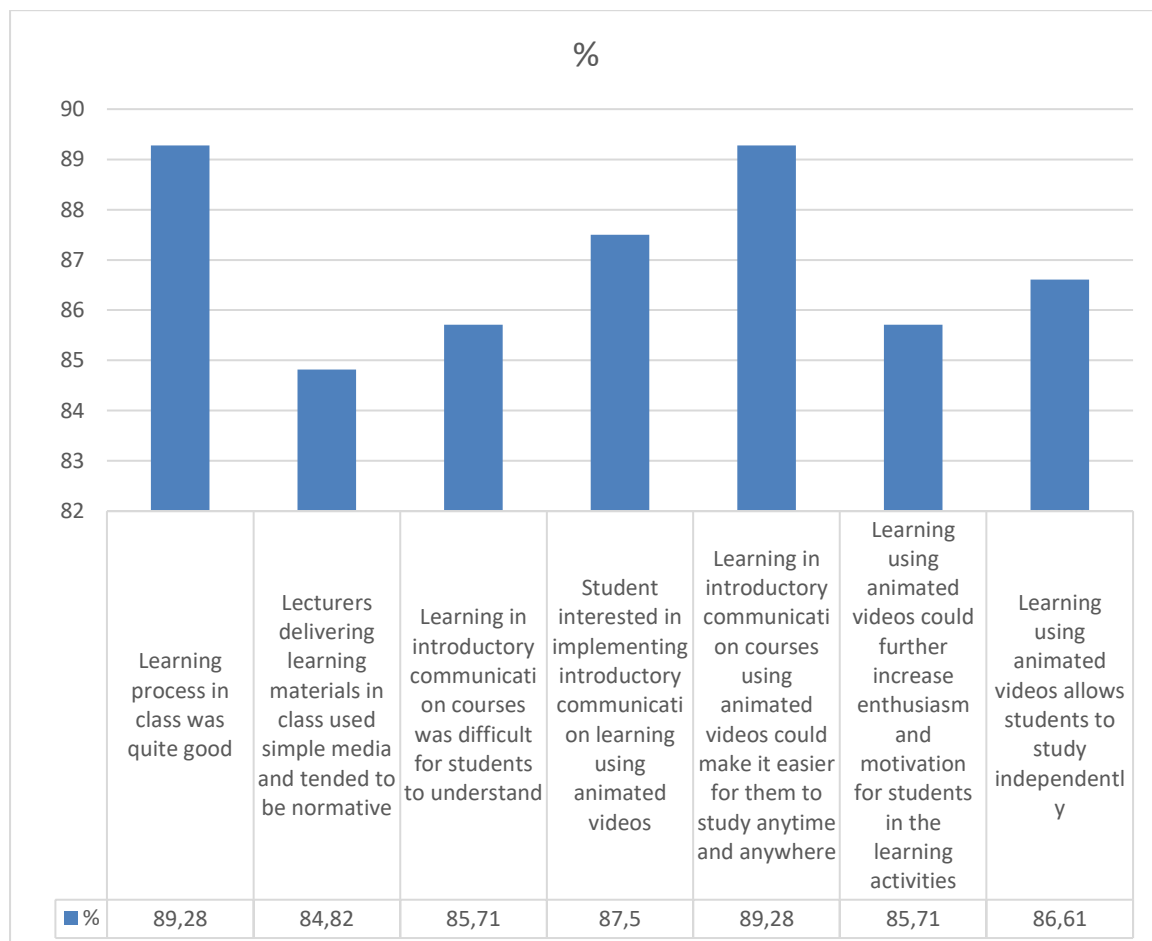


Figure 1. Results of Need Assessment

## Discussion

Of the 112 students in the Introduction to Communication Course, 86.99% thought animated videos were necessary for teaching and learning activities. The survey findings showed that students wished to learn how to use animated videos. Because there are audio, visuals, and animated characters, animated videos make learning more interesting (Kurniawan et al., 2022; Prilosadoso et al., 2021). If students still do not grasp the lessons presented in the learning media, animated videos can be seen repeatedly. Students also anticipated that animated videos would be introduced to every piece of content in the learning media course to facilitate their study. In addition, students hoped that future innovations and learning strategies would incorporate animated videos to make it more pleasant for them to complete educational tasks.

## CONCLUSIONS AND RECOMMENDATIONS

From the research, it can be concluded that animated videos are needed to learn Introduction to Communication Course. Students need learning media to accommodate their learning needs and be used anywhere and anytime. Animated videos are also needed because students feel these learning media can increase their learning motivation. Increased motivation in students later will be aligned with increased learning outcomes in Introduction to Communication Course. Thus, innovations made in learning will positively impact education at the university level.

## REFERENCES

- Adi Apriadi Adiansha, & Khairul Sani. (2021). Pengaruh Model Brain Based Learning dan Problem Based Learning terhadap Keterampilan Berpikir Kompleks Matematis ditinjau dari Kreativitas Siswa Sekolah Dasar di Kabupaten Bima. *Jurnal Pendidikan Mipa*, 11(1), 36–44. <https://doi.org/10.37630/jpm.v11i1.454>
- Ahmat Miftakul Huda, & Suyadi. (2020). Otak dan Akal dalam Kajian Al-Quran dan Neurosains. *Jurnal Pendidikan Islam Indonesia*, 5(1), 67–79. <https://doi.org/10.35316/jpii.v5i1.242>
- Crebbin, W., Guest, G., Beasley, S., Tobin, S., Duvivier, R., & Watters, D. (2021). The influence of experience and expertise on how surgeons prepare to perform a procedure. *ANZ Journal of Surgery*, 91(10), 2032–2036. <https://doi.org/10.1111/ans.17019>
- de Gagne, J. C., Park, H. K., Hall, K., Woodward, A., Yamane, S., & Kim, S. S. (2019). Microlearning in health professions education: Scoping review. *JMIR Medical Education*, 5(2), 1–10. <https://doi.org/10.2196/13997>
- Delawati, D. (2019). Keterampilan Berpikir Kritis: Model Brain-Based Learning Dan Dan Model Whole Brain Teaching. *Jurnal Bidang Pendidikan Dasar*, 3(2), 9–14. <https://doi.org/10.21067/jbpd.v3i2.3356>
- Fitriyani, Anna Maria Oktaviani, A. S. (2022). Jurnal basicedu. *Jurnal Basicedu*, 6(4), 5877–5889. <https://doi.org/10.31004/basicedu.v5i4.1230>
- Hamonangan, R. H. (2020). Peningkatan Daya Ingat Menggunakan Model Pembelajaran Brain Based Learning. *Dharmas Education Journal (DE\_Journal)*, 1(2), 201–208. <https://doi.org/10.56667/dejournal.v1i2.150>

- Immanuel, Waluya, S. B., & Mariani, S. (2021). The Effectiveness of Brain Based Learning Assisted by Schoology towards Students' Creative Thinking and Self-Efficacy. *Journal of Primary Education*, 10(3), 274–281. <https://journal.unnes.ac.id/sju/index.php/jpe/article/view/34902>
- Ishthifa, N., Iai, I., Nw, H., & Timur, L. (2020). PENGARUH MODEL PEMBELAJARAN BRAIN BASED LEARNING BERBANTUAN MEDIA AUDIO TERHADAP KETERAMPILAN Nurul Ishthifa ' lyati. 1(4), 29–37.
- Juliantini, L. S., Jampel, I. N., & Sujendra Diputra, K. (2020). Pengaruh Model Pembelajaran Brain Based Learning Berbantuan Media Konkret Terhadap Kemampuan Pemecahan Masalah Matematika Siswa Kelas IV SD. *Thinking Skills and Creativity Journal*, 3(1), 8–17. <https://doi.org/10.23887/tscj.v3i1.24304>
- Karaduman, G. B., & Cihan, H. (2018). The effect of multiple intelligence theory on students' academic success in the subject of geometric shapes in elementary school. *International Journal of Higher Education*, 7(2), 227–233. <https://doi.org/10.5430/ijhe.v7n2p227>
- Koşar, G., & Bedir, H. (2018). Improving knowledge retention via establishing brain-based learning environment. *European Journal of Education Studies*, 4(9), 208–218. <https://doi.org/10.5281/zenodo.1298918>
- Nurasiah, I., Rachmawati, N., Supena, A., & Yufiarti, Y. (2022). Literatur Riview: Model Pembelajaran Brain Based Learning di Sekolah Dasar. *Jurnal Basicedu*, 6(3), 3991–4003. <https://doi.org/10.31004/basicedu.v6i3.2768>
- Paul, H. J. (2019). Brain-based and learning theories: Application of theories in the classroom. *European Journal of Education Studies*, 5(12), 1–19. <https://doi.org/10.5281/zenodo.2612887>
- Putri, C. M., Audianti, E., Neli, & Noviyanti, S. (2022). Implementasi Model Project Based Learning Pada Muatan IPA Kelas V Sekolah Dasar Di SD N 34/I Teratai. *Al-Irsyad*, 4(3), 290–297. <https://core.ac.uk/download/pdf/322599509.pdf>
- Rihanah, Y., Kudsiah, M., Alwi, M., & Studi Pendidikan Guru Sekolah Dasar, P. (2021). Pengembangan Modul Pembelajaran Tematik dengan Model Pembelajaran Brain Based Learning Kelas III SDN 4 Masbagik Timur Tahun Pelajaran 2021/2022. *Jurnal Pendidikan Tambusai*, 5(3), 6203–6213. <https://www.jptam.org/index.php/jptam/article/view/1934>
- Saputra, D. S., Yuliati, Y., & Agustina, W. J. (2019). Penerapan Model Brain Based Learning Bernuansa Lingkungan Sekitar Dalam Meningkatkan Pemahaman Siswa Pada Pembelajaran IPA di Kelas V Sekolah Dasar. *Jurnal Lensa Pendas*, 4(1), 1–9.
- Soleimani, D. G., KHORMAEE, F., JOKAR, B., & HOSSEIN, C. M. (n.d.). The present study aims to provide a brain-based Reading Teaching method in the primary schools and to compare its effectiveness with the current teaching method. 2020.
- Syarif, I., & Rahmat, R. (2018). Penerapan Model Brain-Based Learning Terhadap Peningkatan Karakter Peserta Didik Kelas Ii Sekolah Dasar. *Edumaspul: Jurnal Pendidikan*, 2(2), 87–90. <https://doi.org/10.33487/edumaspul.v2i2.13>



- Triana, M., Zubainur, C. M., & Bahrun, B. (2019). Students' Mathematical Communication Ability through the Brain-Based Learning Approach using Autograph. *JRAMathEdu (Journal of Research and Advances in Mathematics Education)*, 4(1), 1–10. <https://doi.org/10.23917/jramathedu.v4i1.6972>
- Valen & Satria, T. G. (2021). Jurnal basicedu. *Jurnal Basicedu*, 5(4), 2199–2208.
- Vihokpaibul, P. (2020). Brain-Based Learning Materials and Mathematics Learning Skills of Primary 1–3 Students. *PalArch's Journal of Archaeology of Egypt ...*, 17(9), 1746–1767. <https://archives.palarch.nl/index.php/jae/article/download/4005/3943>
- Winter, R. M. (2019). the Benefit of Utilizing Brain-Based Learning. *Journal of Instructional Research*, 8(1), 82–91.
- Yustitia, V., Wardani, I. S., & Juniarso, T. (2019). the Effect of Brain Based Learning Model on Student'S High Order Thinking Skills. *EduHumaniora | Jurnal Pendidikan Dasar Kampus Cibiru*, 11(1), 71. <https://doi.org/10.17509/eh.v11i1.14058>

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