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UTILIZATION OF COMPUTER TECHNOLOGY-BASED VIDEO (SCHOOL TUBE) AS LEARNING MEDIA

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Abstract: The utilization of technology in digital era has been beneficial for all aspects of human life including education. Technology is also used as the problem solvers and solutions for educational problems faced by teachers and students in schools. Based on that situation, this research proposed to analyze and discover the impact of School Tube utilization as the learning media at Madrasah Aliyyah Negeri (MAN) 1 in Lhokseumawe. This qualitative research used a descriptive approach and employed two data collection techniques that are interview and observation. The respondents of this research were teachers and school administrators at MAN 1 in Lhokseumawe. This research found that the utilization of SchoolTube at MAN 1 Lhokseumawe has positive impact to help students in learning their subjects. It directs students to learn independently that promotes autonomous and asynchronous learning model. Besides that, School Tube also helps teacher in providing materials for students to learn when the teachers need to attend their administrative duties outside the classroom. On the contrary, some teachers were still found not proficient in using this media. Moreover, as a free learning media, School Tube still has limitation access, so the students could not use it outside the school compound. Thus, it is suggested to the school authorities to train and enhance teachers' ability through workshop in using School Tube and other audiovisual application as learning media.

Keywords : Learning Media, Multimedia, Schooltube.

INTRODUCTION

The utilization of media in teaching and learning process is believed helping students' activities becomes more attractive and interactive (Kirkwood & Price, 2014; Winarto et al., 2020). Media could convey the learning materials as the audio, visual and audiovisual so it stimulates students' attention and interest and build emotional attachment between students and their learning materials (Huang et al., 2016). Besides that, media also helps teachers to create lively classroom environment by using vivid and attractive visual. For example when teachers were able to bring interesting materials when taught the human science monotonous subjects such as history, sociology, and anthropology (Efendi, 2019). Media integration in learning process has huge impact toward students' involvement and participation during teaching and learning activities. By maximizing the use of various media such as audio, visual and audiovisual, teachers could present the information clearly and interestingly (Abdulrahman et al., 2017; Winarto et al., 2020). In other words, by using media teachers could create meaningful learning experience and enrich students' understanding.

One of the main benefits from media utilization in learning process is the ability to create dynamic classroom environment (Setyaningsih & Suchyadi, 2021). Visualization provided by media could significantly increase the clarity and interest level of learning materials. This situation was usually found in social studies subjects taught using traditional methods, such as teaching history using lecturing and taking notes (Efendi, 2019). However, teachers could improve classroom situation by using visual media such as pictures, photos, posters, videos, or others interactive presentation tools. So that, teachers could attract students' attention and create lively classroom environment.

Another benefit from media utilization is to cater various learning experiences to promote inclusive learning and student-centered design (Ewing, 2020). Visual and audiovisual media gives multisensory learning experiences for students with different learning styles (Suryaratri et al., 2019). Some students prefer to learn using visual media while the others prefer audio. Media could provide clearer and more effective knowledge. By combining various format of medias, teachers could accommodate students' need and provide inclusive learning environments for all students. In the end, it could make students participating actively in learning process and having connection with the learning materials (Puspitarini & Hanif, 2019; Wanodya, 2023).

In short, the benefits of media intergration in the learning process has a significant impact on student engagement and learning experience. By utilising various forms of media, teachers could present information in a clear, engaging, and immersive way. The use of media also facilitated the the subject matter in stimulating students' interest and emotional attachment to the material. Besides, media could enhance the classroom atmosphere by providing clearer and more interesting visualisations, especially on subjects that may appear monotonous. In addition, media could also cater the diverse learning styles and preferences, promoting inclusivity and active participation of students.

On the other hand, students' characteristics and learning styles determined the media use in learning activities. An appropriate media must be adapted to the learning styles of students, such as visual, auditory, and kinesthetic. Besides that, the characteristics of the learning material itself also became the factor whether the media used or not in classroom, because proper media selection could help transfer knowledge more realistically to students (Puspitarini & Hanif, 2019). Therefore, the good media used in learning activities should have three main elements of media, namely visual, sound and motion (Wanodya, 2023). In general, there are three types of learning media: visual media, audio media, and audiovisual media (Wisada et al., 2019). Visual media include pictures, graphs, tables, and others. Audio media, for example, sound recordings. Audiovisual media include videos and educational soap operas. Video is a medium that contains audio and visual elements, so it is called audiovisual media. With audiovisual media, students can see the real action of what is contained in the media, this can stimulate student learning motivation (Wisada et al., 2019).

Further, the current digital era learning model was different compared to the conventional learning model (Azis, 2019). In the digital era learning model differentiated to three models: online, offline and collaboration (Shah & Chowdhury, 2016). First, teachers provide learning materials online, so the students then could download and study the materials through offline. Secondly, teachers provided learning materials online and students studied the materials via online as well, and third, the collaboration between online and offline learning. Besides that, there is also a learning model that is not tied to teachers who provide learning materials, but the students can access learning materials independently through online learning resources. Especially post Covid-19 time when the digital era supported by the internet network which allows everyone to learn on their own without being directed by the teacher in real time. For example the blended learning that combines face-to-face learning mode and technology-mediated intruction (Cronje, 2020). Through this model, students are given the opportunity to learn independently from home (theoretical) and learn directly at school (practical) (Subakti, 2022). In addition, through face-to-face meetings, students would have the opportunity to ask the teachers directly about material that could not be understood during online session. The implementation of the blended learning model can be arranged according to the policies of each educational institution, for example using the 60:40 model, where the face-to face session is 60% and 50% for online session.

Another popular leaning model is hybrid learning where the teacehers teach students to learn at home and school using technology (Zulaicha et al., 2022). The difference between hybrid and blended learning are; where in blended learning daily teachers' attendance is mandatory, in hybrid learning, the in-person teachers' attendance is not mandatory. Besides, online materials could substitutes in-person teaching in hybrid learning, while in blended learning, the online materials serve as the supplementary support for face-to-face session (Hybrid Learning vs Blended Learning: What's the Difference?, 2023).

Furthermore, the most current model is E-learning can be used in the learning process (Hasriadi, 2022). E-learning is the basic use of technology and communication in education. E-learning method does not require students to stay in class and listen to the teachers. The teachers also do not need to be the main source of learning activities. E-learning is a learning method that encourages students to be more active than the teachers (Alenezi, 2020; Jethro et al., 2012). It promotes autonomous learning and asynchornous model (Misnawati et al., 2021; Wahyuni & Hartono, 2022). E-learning system can increase learners' motivation to learn, and learning is more

fun, which can support better learning outcomes. E-learning becomes popular because the uncontrollable technological developments (Khyzhniak et al., 2021). Thus, it requires teachers to continue to be creative in presenting teaching materials, in which essence e-learning is one of the best solutions for teachers to the learning process that demands rapid development.

RESEARCH METHODOLOGY

This qualitative research employed interview and observation to collect the data. The respondent of interview were teachers and administrative staff (TU) at MAN 1 Lhokseumawe. Data processing techniques were carried out through transcribing the interview audio, then the manuscripts were annotated and conceptualized. After that, the data were segmented based on the keyword from questions. Then the results were explained and presented narratively. In the end the conclusions were derived from the analysis as the result of this research. :

RESULTS AND DISCUSSION

Result

Based on the observation carried out, it was found that MAN 1 Lhokseumawe is a school that uses audiovisual learning media namely School Tube. This finding was supported by interview result that mentioned,

“School Tube is one of digital learning medias own by MAN 1 Lhokseumawe and favoured by teachers here.”

It was because School Tube is a good and effective learning media for students and teachers. However, from observation activities, this research discovered that there are still some obstacles for teachers in using it. One of them were the lack of teachers’ skills to create content in School Tube. It was happened because of the lack of teachers’ expertise to use technology. Besides that, there were only 5% teachers who could use School Tube effortlessly and efficiently.



Figure 1: JIBAS interface

Figure 1 is the homepage of the JIBAS application. It is the multimedia and multiple purpose application that catered all administration need of MAN 1 Lhokseumawe. One of the features is the School Tube, which is the feature that asissts learning process and teacher-student communication related classroom activities.

Result

The Benefits of Utilizing School Tube in Learning Activities at MAN 1 Lhokseumawe

This research found that the utilization of School Tube as learning media has been beneficial for MAN 1 Lhokseumawe students, especially in learning English. For example, by using School Tube, students could find how to pronounce English vocabulary correctly through videos posted on the School Tube.



Figure 2: Schooltube for English

Moreover, it could become a platform to upload interesting and creative videos made the teachers, so it also could encourage teachers' creativity. As mentioned by Selfa-Sastre et al., (2022) that technology media could become the medium to create co-creative skills both for teachers and students. Meliala et al., (2021) also added that teachers creatively combine different types of media such as power point, videos, and pictures to enlighten their work and attract students' attention. Besides, students would be more eager to learn since they could find different types of medias in School Tube, such as sound recording (audio), pictures, power points (visual) and videos (audiovisual), as respondent said:

"School Tube could boost students' learning motivation because it could attract students' interest more than other media. So, it was indirectly increased the quality of students' learning outcomes."

Additionally, The MAN 1 Lhokseumawe teachers also mentioned there were several things that must be considered in creating videos using School Tube application, for examples, the preparation of necessary equipments such as camera, lighting, and microphone. The teachers also had to ensure that all equipments could function properly so that the recording process could run smoothly. In the process of recording, either it was alone or with team, the teacher needed to assure to record based on programme guideline that has been set before. Besides that, including examples could support video made by teachers, for instance appropriate illustrations, such as tables, diagrams, animations, or other media. In the end, once the video footage and illustrations have been collected, the learning video should be edited. There is varied software that can be used in editing stage, such as Windows Movie Maker, Adobe Premiere, Corel Video, and others. During this process, teachers need must be creative and think out of the box so that students would enjoy watching the learning video.

The Benefits of Utilizing School Tube in Learning Activities at MAN 1 Lhokseumawe

The important aspect that needs to be raised in students is the motivation to learn. If students have high learning motivation, they will have bigger opportunity to achieve learning goals and can also improve student learning outcomes. As mentioned before, School Tube was found as one of the effective medias that were able to arouse MAN 1 Lhokseumawe students learning motivation and to improve their learning outcomes. It was because students' literacy level at MAN 1 Lhokseumawe was still insufficient. So, the utilization School Tube as Multimedia for leaning is more favourable. MAN 1 Lhokseumawe students prefer to use School Tube since its

similarity with YouTube that can provide not only audio and visual media, but also audiovisual media. It was believed could fulfill various students' learning style and preferences (Suryaratri et al., 2019).



Figure 3: Schooltube for Science

School Tube was considered as an effective learning media because it was useful in providing interactive information about education and learning topics. The teachers mentioned that students preferred School Tube because it could present the subject and materials in audiovisual form accurately. Similar situation was also mentioned by Abdulrahaman et al. (2017) and Winarto et al. (2020), they argued that that the amplified use of media could present the information clearly and interestingly for students. Teachers also said by using School Tube, students were able to access the information for free from anywhere without time and space limitation. Besides that, School Tube also provided various types of media, such as audio, video, power point slides, pictures, and other attachments in pdf format. The situations above made students' motivation improved, their interest increased and stimulated their autonomous learning (Ridha et al., 2021). In other words, media could be the encouragement for students' attention and interest, it also could attach students to their learning materials (Huang et al., 2016).

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Moreover, MAN 1 Lhokseumawe teachers and students favoured School Tube than other medias because its equation with YouTube, which both are audiovisual media. However, on the plus point School Tube provided two-way communication platform for teachers and students as more appropriate feature for education. So, the teachers could interact with their students effectively and could assign the students directly on School Tube without the need to employ another communication media.

The Positive and Negative Effects of School Tube at MAN 1 Lhokseumawe

According to interview and observation, the impacts of School Tube were found at MAN 1 Lhokseumawe fell into two categories, positive and negative. One of the positive impacts was the advancement of information and communication technology that allowed the development of virtual-based classes. Thus, for the teachers were easier to provide material when they could not present at school. So, the teachers were not always required to be in the same room with their students (Zhao & Watterston, 2021). Moreover, School Tube as learning media could promote students' independence learning or known as autonomous learning. As mentioned by (Wahyuni & Hartono, 2022), digitalize materials (such as posted and uploaded by teachers in School Tube) enabled students' self-directed learning and their ability to control their learning environment and motivation. Indeed, it eased teachers' workload to explain new materials since the students already learned the materials before the class. Beside that, MAN 1 Lhokseumawe teachers said,

"School Tube have enhanced teachers' technology proficiency by integrating School Tube in teaching activities and learning administration system."

They believed that the implementation of School Tube made the administration system in an educational

institution easier to comprehend and more efficient. It also induced e-learning innovation in teacher-student activities and facilitated the education process as supported by Winarto et al., (2020) in their paper.

On the other hand, even though the technology is advancing, and the engagement of learning media such as School Tube in educational institution was beneficial, but when the media was mishandling, it could raise the problem and cause negative impacts on school. One of unfavourable effects arose at MAN 1 Lhokseumawe because of School Tube utilization was the learning device misapplication. The teachers told that, it was necessary for students to bring and use electronic device such as laptop and handphone at school. Unfortunately, the teachers found some students used the device to access unnecessary and unrelated information, sites, or even played games at the school compound or during the class. The teachers and school administrators agreed that these behaviours would lead the degradation of school's ability to achieve its aims, goals, and objectives. Similar situation also found by Kuznekoff and Titsworth (2013) who argued that there were many students that use their smartphone to access the irrelevant information with classroom material.

Furthermore, another disapproved effect of School Tube was it made teachers ignorant and unresponsive to their students, since the school administrators found that some teachers depend too much on School Tube. These teachers tended to upload the material on School Tube then they did not re-check the learning progress and process afterward. So, the students who tempt to interact with the teachers would be neglected and did not get beneficial feedback from their teachers. In addition, in the situation when the teachers had less interaction with their students have made the students to pay less respect to their teachers. Some teachers complained since the utilization of School Tube at MAN 1 Lhokseumawe, the students became impolite and mannerless. The school administrators argued that it was because, the classroom communication between teachers and students usually included teacher's advice that teach manner and politeness. However, this interaction happened less and less nowadays.

Besides that, the use of School Tube became challenges for veteran teachers who used to teach using conventional methods. The respondents mentioned,

"The old teachers hardly could operate School Tube, and they did not bother to learn this application because the media is too complicated, and they assumed it was not their time anymore to learn something new."

This finding was comparable with a case in Tunisia where the group of saboteurs teachers who skeptical to any educational reform and refused to use technology in teaching (Hamlaoui, 2021). The researcher of this case argued that the factors influenced this group of teachers because of their lack of ICT skills and their lack of confidence in using technology in front of the class. After all, this study found that, the positive effect of School Tube utilization became the factors that made this audiovisual media favour by students and teachers at MAN 1 Lhokseumawe. While the negative effects that cause by the minority cases did not reduce School Tube effectiveness in promoting MAN 1 Lhokseumawe students' learning motivation.

School Tube Evaluation as Learning Media

Improving the quality of education in digital era could not be separated from technology as the most important component to build a quality education system. Thus, the existence of technology in the educational environment must be supported by all school stakeholders who strongly motivated to develop education (Falloon, 2020; Tondeur et al., 2017). In this case, the utilization of School Tube as learning media at MAN 1 Lhokseumawe could be said as one of the ways to develop education system effectively. Besides that, it was also one of the programs used by teachers and school administrators at MAN 1 Lhokseumawe to path the better future of education. This media was certainly supported by the facilities and infrastructures own by MAN 1 Lhokseumawe as mentioned by one interviewee,

"The contributing factor of School Tube implementation at MAN 1 Lhokseumawe is the **availability of school infrastructure and facility**, besides that **the sufficient Internet network** also make it easy to access the School Tube."

From the statement above, it could be argued that the employment of School Tube could improve education quality in general and school quality specifically. Certainly, school stakeholders such as principals, teachers, and administrators need to work together to get this through (Setiawan et al., 2022). Moreover, the availability of good school infrastructure and facility could become additional point to support school's program to give a

better education (Khikmah, 2020).

Furthermore, School Tube has several advantages when it is utilized as learning media at MAN 1 Lhoksemawe. Firstly, it could provide two ways communication between teachers and students directly in the media, unlike YouTube. Secondly, School Tube is a free learning media, so there was no additional cost needed when teachers and students used it. Lastly, School Tube helped teachers a lot when they could not attend the classroom directly to provide subject matter for their students. As generally known, beside teaching, teachers in Indonesia also have administrative job that sometimes might disturb their teaching schedule (Ghulamudin, 2020). So, by utilizing School Tube, MAN 1 Lhoksemawe could ensure the learning process keep conducted and the students could get through the subject and topics on time.

On the contrary, there were also several hurdles face by teachers and school administrators at MAN 1 Lhoksemawe. As discussed before, there were some teachers who did not have sufficient skill yet in operating School Tube or in creating its contents such as audio, power point slides, video etc. Sadly, according to the school administrators, these group of teachers also did not have any motivation to learn new technology skills since they taught there were younger teachers who could do the job.

“The old teachers **hardly could operate** School Tube, and they **did not bother to learn** this application because the media is **too complicated**, and they assumed it was **not their time anymore to learn** something new.”

The school administrators predicted that there are only 5% of teachers who can use School Tube profeciently. Which means there only minority teachers who can operate this media and create its content well. In addition, since School Tube is a free media, it has limitation access that become the disadvan-tege for MAN 1 Lhokseunawe users. The teacher said,

“The inhibiting factor is that School Tube **could only be used in the school compound**, if (students and teachers want to use it) outside the school area **School Tube could not be accessed, be it at home or elsewhere.**”

Another teacher also added,

“Teachers' difficulty with the School Tube learning system (implementation) is that when at school they (students) could use the School Tube for learning, but when **outside the school area they (students) cannot access it.**”

To minimize the challenges above, the teachers and school administrator at MAN 1 Lhoksemawe agreed that teachers need to get workshop and coaching in utilizing School Tube prociently. As an interviewee mentioned,

“The solution to overcome teachers' difficulties in using school tubes is to **provide special training** on the use of School Tubes.”

Besides that, it is suggested for teacher to also get workshop to use additional application or media to cover up the shortcomings of School Tube limited access. So that, the students might revisit and revise the materials that they got on School Tube at home. Thus, the learning process could be optimized.

CONCLUSION

Conclusion

In conclusion, this study finds that School Tube is a learning media which gives nourmerous benefit for teaching and learning activities at MAN 1 Lhokseumawe. Among its benefits is enabling students to learn correct pronunciation of English vocabulary through videos available on School Tube and serving as a platform for teachers to upload creative and interesting videos, thus enhancing their creativity. Besides, its features that offers various types of media, including sound recordings, pictures, PowerPoint presentations, and videos, which can significantly boost students' motivation to learn. It leads to facilitate autonomous learning skills and an asynchronous learning model among students. Furthermore, positive impacts of utilizing School Tube at MAN 1 Lhokseumawe include the advancement of information and communication technology, enabling virtual-based classes, promoting autonomous learning among students, and enhancing teachers' technology proficiency. The MAN Lhokseumwe teachers mention, that this advancement is facilitated by digitalized materials posted on School Tube, which allow students to engage in self-directed learning before class, thereby reducing teachers' workload and facilitating the education process. Moreover, School Tube integration enhances the educational

institution's administration system, making it more efficient and inducing e-learning innovation in teacher-student activities.

However, compared to all positive effect of SchoolTube, The negative impacts also exist. These include the misapplication of learning devices, where students access unnecessary information or play games during school hours. This behavior undermines the school's objectives and can lead to degradation. Additionally, some teachers become overly reliant on School Tube, neglecting to monitor students' learning progress or provide beneficial feedback, leading to decreased teacher-student interaction and students' declining respect for teachers. Furthermore, veteran teachers who are accustomed to conventional teaching methods may struggle to adapt to School Tube, hindering their willingness to use technology in the classroom. So, it is suggested that the teachers could enhance their skill through workshop and training arranged by school.

Suggestions

Practically, It is suggested that the school board to monitor students and teachers in utilizing SchoolTube, so that the media that supposedly improve students' learning become the reason of students' decreased performance. Beside that, the school board also need to organize a proper workshop and training for SchoolTube usage and other media workshops to develop and enhance teachers ability in using computer technology. Furthermore, this study could be the corner stone for future research in exploring the utilization of computer technology-based video especially SchoolTube.

REFERENCES

- Abdulrahman, M. D., Faruk, N., Oloyede, A. A., Surajudeen-Bakinde, N. T., Olawoyin, L. A., Mejabi, O. V, Imam-Fulani, Y. O., Fahm, A. O., & Azeez, A. L. (2017). Multimedia tools in the teaching and learning processes: A systematic review. *HLY*, 6. <https://doi.org/10.1016/j.heliyon.2020.e05312>
- Alenezi, A. (2020). The Role of E-learning materials in enhancing teaching and learning behaviors. *International Journal of Information and Education Technology*, 10(1), 48-56. <https://doi.org/10.18178/ijiet.2020.10.1.1338>
- Azis, T. N. (2019). Strategi pembelajaran era digital. *Annual Conference on Islamic Education and Social Sains (ACIEDSS 2019)*, 1(2), 308-318.
- Cronje, J. C. (2020). Towards a new definition of blended learning. *Electronic Journal of E-Learning*, 18(2), 114-121. <https://doi.org/10.34190/EJEL.20.18.2.001>
- Efendi, N. M. (2019). Revolusi pembelajaran berbasis digital (penggunaan animasi digital pada start up sebagai metode pembelajaran siswa belajar aktif). *Habitus: Jurnal Pendidikan, Sosiologi, & Antropologi*, 2(2), 173. <https://doi.org/10.20961/habitus.v2i2.28788>
- Ewing, A. (2020). The Impact of Student-Centered Learning, Through the Use of Technology, On the Level of Engagement in Middle School Students with Mild Intellectual Disabilities: A Qualitative Study [Northwest Nazarene University]. <https://www.proquest.com/openview/0477ce51d168a4d029e89fd71b55e670/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Falloon, G. (2020). From digital literacy to digital competence: The teacher digital competency (TDC) framework. *Educational Technology Research and Development*, 68(5), 2449-2472. <https://doi.org/10.1007/S11423-020-09767-4/FIGURES/4>
- Ghulamudin, M. (2020). The effect of government policy on the principal tasks of teachers as current educators. *JELLE: Journal Of English Literature, Linguistic, and Education*, 1(1). <https://doi.org/10.31941/JELE.V1I1.962>
- Hamlaoui, S. (2021). Teachers' resistance to educational change and innovations in the middle east and north africa: A case study of Tunisian Universities. In *Re-Configurations: Contextualising Transformation Processes and Lasting Crises in the Middle East and North Africa* (pp. 171-184). Springer. https://doi.org/10.1007/978-3-658-31160-5_11
- Hasriadi, H. (2022). Metode pembelajaran inovatif di era digitalisasi. *Jurnal Sinestesia*, 12(1), 136-151. <https://sinestesia.pustaka.my.id/journal/article/view/161>
- Huang, T. C., Chen, C. C., & Chou, Y. W. (2016). Animating eco-education: To see, feel, and discover in an augmented reality-based experiential learning environment. *Computers & Education*, 96, 72-82. <https://doi.org/10.1016/J.COMPEDU.2016.02.008>
- Hybrid Learning vs Blended Learning: What's the Difference? (2023, November 13). *Claned*. <https://claned.com/hybrid-learning-vs-blended-learning/>
- Jethro, O. O., Adewumi, M. G., & Thomas, A. K. (2012). E-learning and its effects on teaching and learning in a global age. *Article in International Journal of Academic Research in Business and Social Sciences*, 2(1). www.hrmar.com/journals

- Khikmah, N. (2020). Manajemen sarana dan prasarana untuk mengembangkan mutu pendidikan. *JAMP: Jurnal Adminitrasi Dan Manajemen Pendidikan*, 3(2), 14–21. <http://journal2.um.ac.id/index.php/jamp/>
- Khyzhniak, O., Zhovnir, A., Mikhno, N., Stadnik, O., Folomiejiev, M., & Shapoval, A. (2021). E-learning efficiency in an age of global risks and changes. *Postmodern Openings*, 12(4), 197–209. <https://doi.org/10.18662/po/12.4/369>
- Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: what is 'enhanced' and how do we know? A critical literature review. *Learning, Media and Technology*, 39(1), 6–36. <https://doi.org/10.1080/17439884.2013.770404>
- Kuznekoff, J. H., & Titsworth, S. (2013). The impact of mobile phone usage on student learning. *Communication Education*, 62(3), 233–252. <https://doi.org/10.1080/03634523.2013.767917>
- Meliala, E. P., Purba, P. W. R., Panjaitan, L., Doloksaribu, L., & Tarigan, N. W.-P. (2021). An analysis of English teachers' creativity in media-based learning at the tenth-grade students. *Journal of Languages and Language Teaching*, 9(1), 105–110. <https://doi.org/10.33394/JOLLT.V9I1.3388>
- Misnawati, M., Sakkir, G., Puspita, N., Akbar, Z., & Yusriadi, Y. (2021). Student learning interest in Covid-19 pandemic age by blended E-Learning (asynchronous and synchronous). *The 11th Annual International Conference on Industrial Engineering and Operations Management*.
- Puspitarini, Y. D., & Hanif, M. (2019). Using learning media to increase learning motivation in elementary school. *Anatolian Journal of Education*, 4(2), 53–60. <https://doi.org/10.29333/AJE.2019.426A>
- Ridha, M., Firman, & Desyandri. (2021). Efektifitas penggunaan media video pada pembelajaran tematik terpadu di sekolah dasar saat pandemi Covid-19. *Jurnal Pendidikan Tambusai*, 5(1), 154–162.
- Selfa-Sastre, M., Pifarré, M., Cujba, A., Cutillas, L., & Falguera, E. (2022). The role of digital technologies to promote collaborative creativity in language education. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/FPSYG.2022.828981/BIBTEX>
- Setiawan, M. R., Sudrajat, A., & Tedjawiani, I. (2022). Manajemen berbasis sekolah (MBS) dalam meningkatkan mutu sekolah (studi deskriptif tentang peran kepala sekolah dalam MBS pada SMPN 3 dan SMPN 4 Malangbong). *JiIP - Jurnal Ilmiah Ilmu Pendidikan*, 5(5), 1335–1346. <https://doi.org/10.54371/JiIP.V5I5.553>
- Setyaningsih, S., & Suchyadi, Y. (2021). Classroom management in improving school learning processes in the cluster two teacher working group in North Bogor City. *JHSS (Journal of Humanities and Social Studies)*, 5(1), 99–104. <https://doi.org/10.33751/JHSS.V5I1.3906>
- Shah, D., & Chowdhury, A. (2016). Comparative analysis in offline and online execution of design project in collaborative learning environment. *14th International Conference on Humanizing Work and Work Environment* HWWE. https://www.academia.edu/34618860/Comparative_Analysis_in_Offline_and_Online_Execution_of_Design_Project_in_Collaborative_Learning_Environment
- Subakti, M. F. (2022). Inovasi Model Pembelajaran di Era Digital. *Inovasi*.
- Suryaratri, R. D., Prayitno, E. H., & Wuryani. (2019). View of the implementation of multi-sensory learning at elementary schools in Jakarta. *Jurnal Pendidikan Usia Dini*, 13(1), 100–113. <https://journal.unj.ac.id/unj/index.php/jpud/article/view/10507/6885>
- Tondeur, J., van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2017). Understanding the relationship between teachers' pedagogical beliefs and technology use in education: a systematic review of qualitative evidence. *Educational Technology Research and Development*, 65(3), 555–575. <https://doi.org/10.1007/S11423-016-9481-2/METRICS>
- Wahyuni, E., & Hartono, H. (2022). Teaching listening with e-learning model to promote students' learning independence. *AMCA Journal of Education and Behavioral Change*, 2(2), 64–70. <https://doi.org/10.51773/ajeb.v2i2.157>
- Wanodya, R. M. (2023). Literature review: The role of learning media in increasing students' motivation. *The 2nd English National Seminar English Education Study Program*, 66–76.
- Winarto, W., Syahid, A., & Saguni, F. (2020). Effectiveness the use of audio-visual media in teaching Islamic religious education. *International Journal of Contemporary Islamic Education*, 2(1), 81–107. <https://doi.org/10.24239/IJCIED.VOL2.ISS1.14>
- Wisada, P. D., Sudarma, I. K., & Yuda S, A. I. W. I. (2019). Pengembangan media video pembelajaran berorientasi pendidikan karakter. *Journal of Education Technology*, 3(3), 140. <https://doi.org/10.23887/jet.v3i3.21735>
- Zhao, Y., & Watterston, J. (2021). The changes we need: Education post COVID-19. *Journal of Educational Change*, 22(1), 3–12. <https://doi.org/10.1007/S10833-021-09417-3/METRICS>
- Zulaicha, D. F., Safitri, T., Istiqomah, I. A., Ro'is, A. N., Rahmadini, A. L., & Dayu, D. P. K. (2022, November 22). Model Pembelajaran Hybrid Learning Untuk Meningkatkan Pembelajaran Luring Pada Kurikulum Merdeka. *Seminar Nasional Bahasa, Sastra, Seni, Dan Pendidikan Dasar 2 (SENSASEDA) 2*.