



Use of Learning Media to Increase Student Learning Motivation in Junior High Schools

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ABSTRACT

The development of the times greatly influences life, one of which is in the field of education, there are many innovations related to education, one example is the use of learning media in teaching and learning processes and motivation. Lots of learning innovations that produce technology that makes it easier for an educator to provide learning material so that students get motivation to learn. Learning media is very useful in every lesson at the junior high school level. This study aims to determine the application of the use of any media that can influence and encourage students' learning motivation at the junior high school level. This type of research is descriptive qualitative research. Data obtained through observation, interviews and documentation. The results of the study show that the use of learning media on students' learning motivation greatly supports motivation in learning activities. The students were highly motivated when the learning used projector and speaker media. In addition, the use of learning media at the junior high school level has an important role in the interest and motivation of students' learning, including feelings of pleasure and interest in the material increasing. The implication of this research is that educators in delivering learning material in class must be good at choosing and using the right media, educators must also have creative and innovative ideas so that the learning atmosphere of students is more enthusiastic and motivated. The limitation of this research is that the researcher only observed one school, therefore the researcher hopes that future researchers will be able to observe more schools and in a better way.

Keywords: Media, motivation to learn

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INTRODUCTION

As a result of Al-Qur'an Hadith education, students are guided not only to achieve happiness in this life but also towards happiness in the hereafter, which plays an important role in influencing their behavior. With the help of teaching Al-Qur'an Hadith, students are encouraged to achieve a balance between inner and outer development, the relationship between humans and their environment in social life, and their relationship with God (Mischler, 2021; Rohmansyah, 2020; Supraptiningsih & Bariyyah, 2019). In addition, it is hoped that students will have a high degree that exceeds other beings as a result of studying the Al-Qur'an Hadith. Teachers usually often present material in a boring and monotonous way or that's all, according to observations found in interviews with teachers. According to Tuwoso, 2022 believes that educators are the only source of knowledge. Students become less engaged, active, and even less driven to learn as a result of this. In addition, they seem not interested in the Al-Qur'an Hadith learning approach that has been used so far. Teachers do not use interesting media during the teaching process. Only whiteboards and teaching materials are used by him.

Teachers do not use interesting media during the teaching process (Forrester et al., 2018; Miskiah et al., 2019; Xu et al., 2020) This is one of the reasons why students do not participate in class. Meanwhile, a teacher must be able to design learning effectively so that students play an active role and enjoy learning (Miskiah et al., 2019; Scott Kruse et al., 2018; Stanaway et al., 2018). This supports the idea that learning is at the center of the entire educational process. With regard to this scenario, the teacher assumes a leading role in addition to a number of student performance and actions based on the interrelationships that occur in educational settings to achieve certain goals, because according to (Cheng et al., 2018; Rohmansyah, 2020; Sidhu et al., 2018) where the interaction or reciprocal relationship between teachers and students is the main requirement for the teaching and learning process to take place.

Media plays an important role in the implementation of learning because in these activities the use of media as an intermediary can help reduce the confusion of the material offered (Champion et al., 2020; Dwivedi et al., 2021; Ma et al., 2019). With the help of media, difficult material that must be taught to students can be simplified. Teaching aids include all resources that can be used to help students learn more effectively and efficiently, including media. With these tools, it is hoped that learning will be more interesting, concrete, understandable, efficient with time and resources, and produce satisfying learning (Pahayahay & Khalili-Mahani, 2020; Stanaway et al., 2018). The computer is a tool that can be used to encourage student interest in learning (Young et al., 2018). The rapid advancement of technology in the contemporary global era, especially with regard to computers, has an impact on how the field of education develops. These developments can have a positive or negative impact. For example, a beneficial influence is a student's proficiency with computers. It's easy to find various materials related to science as well as various learning resources, such as PowerPoint and others.

The use of computers or laptops in learning Al-Qur'an Hadith can significantly increase students' opportunities to become more motivated and open to interactive

learning, develop their cognitive thinking skills, improve their psychomotor skills, and develop their interest in learning or affective. by opinion (Champion et al., 2020; Güneş et al., 2019; Indrawan et al., 2018). The environment will undoubtedly have an impact on how students develop their thinking and life skills. Based on the results of relevant research related to this study conducted by Suhartina Muammar, in 2018 in her article entitled Information technology-based learning media in increasing interest in learning aqidah morals she said that learning media is a tool that helps the learning process so that the message conveyed becomes more accurate and educational/learning objectives can increase the interest and motivation of learners. Learning media has many impacts on interest and motivation and even student interest. In achieving this, in technology education learning media is needed such as projectors and speakers. The development of educator creativity can also be called an innovation that fosters interesting education from students.

Based on the previous explanation, some of the problems that are the core of the discussion can be described, namely: How to use learning media, interest in learning in class VII students, application of learning media in increasing student interest in learning. Learning technology media here is defined as a tool or anything that can be used to channel stimulate messages, thoughts, attention, motivation, and willingness of students so that they can encourage interest in learning with increased grades and absenteeism.

RESEARCH METHODOLOGY

This study uses a qualitative approach and formulation, data collection is done by means of interviews, observation and documentation. Data analysis was obtained through data collection, data reduction, presenting and formulating these conclusions as recommended by (Yii et al., 2021). The object under study is what media and learning methods are used by educators with innovation, creativity and educator mastery of the use of learning media to stimulate the mind, increase motivation, attract the attention and willingness of students to learn, especially in the Qur'an Hadith subject. By utilizing the basic theoretical foundations that are owned, it makes researchers more aware of the truth that occurs in the field visited. In this study, it provides detailed questions, then the subject will explain descriptively (Güneş et al., 2019; Yii et al., 2021). This method has a deductive mindset, by understanding a phenomenon by using general concepts to explain phenomena that are specific in nature then in qualitative methods it is hoped that researchers can find clues to the problem in depth and thoroughly.

This study aims to present the results of the research process conducted by means of interviews so that researchers can obtain clear information in an observation. In this method the researcher uses data analysis techniques using the formulation of the core problem. Researchers by way of direct interviews with one of the teachers. This strategy was chosen because researchers get more accurate and more concrete information from subjects who experience the process directly. In this study, it requires an observation conducted by researchers, namely in order to get a real realistic picture between characters and humans in order to understand the problems that really occur. This is confirmed by

(Dwivedi et al., 2021) in capturing a truth not only by examining the subject to one person, but two people in different positions to judge from the point of view of two individuals.

The aim of this research is to explore what media and what innovations are made by educators and even the ability of an educator to do so to increase students' motivation and interest in the learning process. Methods of data formulation with targeted interviews that aim to explore specific information through a series of questions submitted by researchers to respondents. Interviews were developed through character components which included descriptions of the concept of character education in schools. According to (Mischler, 2021; Yii et al., 2021) the abilities developed and the innovation and creativity carried out by teachers in applying learning media. Regarding data analysis techniques, data analysis is the process of finding and organizing interview transcripts, and other materials that have been collected by researchers. Analyzing activities are followed by analyzing data, organizing and dividing it into units that can be managed properly again. Seeking and discovering what is meaningful and what is researched and can be reported systematically. In other words, this data is a description of someone's statements about the media and its use. This data analysis was carried out in qualitative research, which was carried out from the beginning of the research by means of interviews, one of which was until the end of the study by interacting with the background and research subjects in the context of collecting the data. This data analysis technique also aims to direct, classify, sharpen, remove unnecessary and organize data so that the final conclusion is.

This type of research is to use a quantitative survey model method, using an online-based Google form and in-depth interviews with one of the students (Chu et al., 2020; Son et al., 2020). Research using this quantitative method is a process to find knowledge and information by using data in the form of numbers as a tool to find out information about what is being researched. For this reason, researchers are trying to understand and describe the understanding obtained through a survey process between researchers and the subjects to be interviewed ("2020 Alzheimer's Disease Facts and Figures," 2020; Yousefpour et al., 2019) . Researchers use analysis from informants so that researchers can understand what really happened (Wallin et al., 2019). By utilizing the basic theoretical foundations that are owned, it makes researchers more aware of the truth that occurs in the field visited. In this study, it did not provide detailed questions, but the questions given to the subject were general questions first, after that was done then made the fishing subject to speak as a whole. This method has a deductive mindset, by understanding a phenomenon by using general concepts to explain phenomena that are specific then in the quantitative method it is hoped that researchers can find clues to the problem in depth and thoroughly.

This study aims to present the results of the research process conducted by means of interviews so that researchers can obtain clear information in an observation. In this method the researcher uses data analysis techniques by using numbers and amounts in his research. Researchers by using online-based communication with Google form and via WhatsApp. This strategy was chosen because researchers get more accurate and more

concrete information about subjects who experience the process directly. In this study, it requires an observation made by researchers, namely in order to get a real realistic picture between characters and humans in order to understand the problems that really occur. In capturing a truth, it is not only by examining one subject, but also needing an approach to many people, because everyone has different views, so they cannot grasp the truth as a whole. Thus the research received is data analysis in nature, this is what causes the research results obtained from the results of research using this quantitative method to have the possibility to experience changes.

The aim of this research is to explore the character formation patterns of students in junior high schools in order to build student character (Z. Li et al., 2018; Mitra et al., 2019). Marsall, Gretchen B. Rossman, stated that the basic methods relied on by qualitative researchers to collect information are, participation in settings, direct observation, in-depth interviews, document review. To obtain accurate data regarding the object of research, the authors will use the 'characteristics of quantitative research, data collection techniques through interviews. Interviews were conducted to obtain data regarding the junior high school teacher's understanding of the patterns of student character formation. interviews can be addressed to these students via the Google Form. Judging from the data source, this research data source uses secondary data sources. secondary data sources, namely sources that do not directly provide data for data collection, for example through other people, documents, Google Forms (Mangaroska & Giannakos, 2019). Methods of data collection using open questionnaires and targeted interviews. Which aims to dig up specific information through a series of questions submitted by researchers to respondents. Interviews were developed through character components which included descriptions of the concept of character education in schools. The character values developed and the approach methods used by the teachers in implementing these character values.

Next is about data analysis techniques. Data analysis is the process of finding and organizing interview transcripts, and other materials that have been collected by the researcher. Analyzing activities are followed by analyzing data, organizing and dividing it into units that can be managed properly again. Seeking and discovering what is meaningful and what is researched and can be reported systematically. In other words, this data is a description of someone's statements about experience or an attitude or belief that is in accordance with the program. This data analysis was carried out in quantitative research carried out since the beginning of the research using Google Form media, one of which was until the end of the study by interacting with the background and research subjects in the context of collecting the data. This data analysis technique also aims to direct, classify, sharpen, remove unnecessary and organize data so that the final conclusion is.

RESULT AND DISCUSSION

Learning that utilizes relevant and interesting media and methods is an effective and innovative learning system. A teacher must be able to use the right tools and

techniques. It is evident from an interview with a Al-Qur'an Hadith teacher who taught class VII on October 8, 2022, that the teacher is a skilled user of educational technology. The instructor claims that he often projects films, textbooks, photographs, and even general doodles onto a whiteboard and uses speakers and a projector to display them. Based on the results of teacher observations and interviews on October 8, 2022, it shows that teachers use various methods and techniques in teaching and learning. The method used by the teacher besides the advice method or what is also called lecture, discussion or question and answer, is also demonstration or practice. Meanwhile the techniques used such as: displaying videos sourced from the internet or even self-made adapted to the learning theme. According to the teacher, in order for the learning process to be interesting, in addition to the varied methods and techniques used, they must also be adapted to the learning objectives to be achieved in the subject matter. The use of technology in learning media is very important.

Technology in education is very important because it can make learning easier and more comfortable. Using technology as a teaching tool can also make lessons more interesting and fun. This is in accordance with the idea that the main purpose of educational media is to increase students' enthusiasm for learning. An effective and motivating learning process, as well as the delivery of messages and lesson content at that time, will be greatly assisted by the use of media at the teaching orientation stage as well. Learning media can increase student motivation and interest while facilitating learning, increasing understanding, presenting knowledge in an interesting and believable way, and condensing material.

Requirements for achieving the learning objectives of the teacher must always be active in choosing learning methods, because the absorption capacity of students is very different, one student with another of course there are differences. This is where teachers are required to be selective in choosing methods and using media so that students can absorb all subject matter, especially religious subjects because that is the subject that distinguishes madrasas from other public schools so that it can be said that learning is successful. Variation is very necessary to achieve the desired goals, namely that learning is not boring and of course attracts attention and can increase students' interest and motivation in learning.

Based on the results of observations in junior high schools, the facilities provided are quite adequate. The facilities and supporting facilities in the form of media owned at this madrasa are blackboards, pictures/posters, several computer units, LCD, computer room and wifi. The Head of the Junior High School also stated, based on this research, the teaching and learning process can also take place outside the classroom by utilizing the surrounding environment. Learning activities will produce the best results when done by developing creative thinking skills, as well as problem-solving skills, and using the classroom as an interesting and fun learning environment, even telling. Active, creative, innovative, even fun learning is one of the learning methods that can be applied by educators.

Based on the results of interviews with teachers and students of class VII junior high schools, it is known that most students stated that they were always present and actively participated in the learning process at school, and were supported by the results of interviews and documentation of the homeroom teacher in the form of student attendance lists per semester, indicating that the frequency the attendance of class VII students is mostly always present in following the subjects. The results of interviews with most of the class VII students and the results of observations by looking at student notes revealed that almost all students tried to complete their notes, because they already had textbooks in which the discussion was quite complete. Even so, it was still students whose records were incomplete.

In addition, based on observations it is known that students have a high level of courage in asking questions and actively participating in training, both in the form of interactive question and answer sessions with the instructor and the implementation of group discussion forums. However, some students are less involved in execution, which makes learning more difficult. Gradually implementing the 2013 curriculum for religious studies in junior high schools. The curriculum places a strong emphasis on using a scientific approach as current pedagogy in the classroom. The scientific method or method includes observing, asking, thinking, trying, and building networks for all subjects. Appropriate media, such as films, videos, images, or real objects related to the subject matter of the discipline being taught, are needed to do this. Students will be more involved and eager to fully contribute to the learning process in this way.

The use of instructional media such as VCD, LCD/Projector, computers, and television which are often used can be used to demonstrate the ability of Al-Qur'an Hadith teachers to use media with various approaches and tactics. The use of instructional media is closely related to the teacher's capacity to use a variety of approaches and strategies, because without them, learning will appear monotonous and the media used will be less able to stimulate learning and promote knowledge, despite their sophistication and form. Based on direct observation of the learning process, the teacher uses a variety of approaches including lectures, debates, question and answer, and demonstrations to teach students the Al-Qur'an Hadith (Mischler, 2021; Rohmansyah, 2020; Rusydiyah et al., 2020).

Technology-enhanced learning resources are needed for the study of Al-Qur'an Hadith to assist students in understanding the subject matter covered. Because the availability of facilities in the form of learning media will have an impact on the learning process, it is important to pay attention to the completeness of the media available in schools when using it for educational purposes. Based on the diversity of media owned by this madrasa, including audio, visual, audio visual and computer lab media, the learning resources offered in the form of instructional media are sufficient to support the success of learning Al-Qur'an Hadith (Ma et al., 2019; Rusydiyah et al., 2020; S. Zhang et al., 2018).

A friendly environment is necessary for teaching and learning process, students will be able to focus and enjoy their studies while doing it. The success of learning in the

learning process is strongly influenced by the student's desire to learn. Therefore, in order for students to achieve maximum learning objectives, tools or media are needed that can improve the quality of students as well as enthusiasm and motivation. Currently, madrasah teachers often use technology to help them offer learning content that requires additional material through the right media. Whether related to aqidah and faith, Al-Qur'an Hadith is content that demands additional understanding. When learning is done using additional media, students will be able to optimize their understanding, learning will not feel boring, and students will become more active and creative. If the Al-Qur'an Hadith which talks about good morals towards others is conveyed in the form of a video related to the subject matter being taught, learning about it will be more enjoyable. This is very important to achieve the learning process that is being carried out in class.

Students do not only experience boredom if the learning method is monotonous which is applied by the teacher. Students are required to be active in accessing information in order to find videos that are appropriate to the material being taught. Middle School has a wifi network that can be utilized by students, teachers, and employees. Of course this is very useful for student learning. They are free to access the internet using the wifi network provided by the Madrasah. Middle school teachers make good use of technology. This is due to the high desire of students to participate in education through information technology media. This approach using information technology for learning is very helpful and beneficial for students, especially when studying Al-Qur'an Hadith education. Learning is assisted by contemporary tools or media, namely media based on information technology, improving the quality of learning and students' interest in the study of Al-Qur'an Hadith Education. Students who were initially not interested in learning topics became more interested in learning. Middle School Al-Qur'an Hadith teachers use information technology learning media to access additional content that can be done inside or outside the classroom by using computer and LCD/projector facilities.

Online content is tailored to basic skills so that students are not hampered in learning. In addition, teachers use power point media to present material in the most interesting way, which facilitates delivery. This implies that learning media includes devices used to deliver instructional content, such as books, tape recorders, cassette players, video cameras, films, slides, and computers. In other words, media is part of learning resources or physical objects that accommodate educational material in settings that encourage learning in students. Therefore, developing a great learning process is a key issue that educators should pay attention to. There are many factors that can influence the learning process to produce high quality results. These factors include qualified instructors, instructional strategies, appropriate learning environments and situations, and use of learning resources. This shows the value of the media in the training and education process.

Al-Qur'an Hadith teachers in junior high schools use a variety of learning media and techniques inside and outside the classroom with the aim of increasing students' understanding of the curriculum and fostering positive educational interactions. Teachers

use various facilities besides technological tools such as computers and projectors for their class lessons with students. Madrasahs as educational institutions must really pay attention to the learning process, and the teacher as the person in charge of providing knowledge about each subject to students is expected to understand how to do it. The achievement of learning objectives cannot be separated from the media used by teachers, and in this era of globalization, information technology is the most popular learning media because it is considered more effective and efficient.

Curriculum planning is one of the best ways to improve educational standards. In order for students to easily absorb information and apply it in their lives, Wakamad, who is responsible for developing the curriculum in junior high schools, must be very careful in considering their needs at all times. daily routine. As stated by Mrs. Hartini Wati as a teacher that 'Usually I use information technology in learning (Indrawan et al., 2018; Mischler, 2021; Shafique et al., 2020) that media use refers to the creation and attachment of text, images, audio, and video using a computer.

Better use of media, such as computers, LCD projectors, the internet, and other tools, should be expanded as a measure of improving the quality of education as it helps people achieve their goals. The use of this media varies depending on the subject being taught so students don't feel bored or repetitive. As a result, when conveying techniques, educators must focus on things such as always being goal oriented, using various media in combination, such as PowerPoint, photos, slides, and supporting applications, and not just one method. According to the Wakamad curriculum section, in improving the quality of education in Junior High Schools, there are various kinds of efforts, including: In compiling the curriculum, it must pay attention to the intellectual, psychological, social and spiritual conditions of students, in addition to local content material, prioritizing competence development of the students themselves. One of the most helpful things to improve the quality of education is curriculum planning. For this reason, the Wakamad who is responsible for curriculum development in junior high schools must be very careful in considering the needs of students at all times, with the clear intention that students can easily absorb knowledge and apply it to them in their daily lives.

The results of this study indicate that the steps taken by teachers in junior high schools in the learning process utilize information technology media and are coupled with the creativity of educators and even innovation to attract students' interest and motivation. In this case, it shows that students are very enthusiastic and enthusiastic and even motivated in participating in learning, especially in class learning, this results in an increase in students' grades and attendance.

CONCLUSION

Based on the results of the research that has been described in the discussion, it can be concluded as follows: First, the use of information technology learning media in the learning process of Aqidah Ahlak in Public Junior High Schools, all educators and educational staff have utilized information technology, but there are some things that still cannot be utilized optimally. maximum.; Second, the use of information technology

learning media in increasing interest and motivation to learn in junior high schools makes students very enthusiastic and motivated in learning in class. Indicators of increasing student learning motivation can be seen from the increased enthusiasm and enthusiasm of students in participating in teaching and learning activities, there does not appear to be a feeling of laziness and fatigue from the facial expressions of students, they always show joy and pleasure while participating in lessons.

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REFERENCES

- Al-Fraihat, D., Joy, M., Masa'deh, R., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. *Computers in Human Behavior*, 102, 67–86. <https://doi.org/10.1016/j.chb.2019.08.004>
- Barrett, L. F., Adolphs, R., Marsella, S., Martinez, A. M., & Pollak, S. D. (2019). Emotional Expressions Reconsidered: Challenges to Inferring Emotion From Human Facial Movements. *Psychological Science in the Public Interest*, 20(1), 1–68. <https://doi.org/10.1177/1529100619832930>
- Bernheim, A., Mei, X., Huang, M., Yang, Y., Fayad, Z. A., Zhang, N., Diao, K., Lin, B., Zhu, X., Li, K., Li, S., Shan, H., Jacobi, A., & Chung, M. (2020). Chest CT Findings in Coronavirus Disease-19 (COVID-19): Relationship to Duration of Infection. *Radiology*, 295(3), 200463. <https://doi.org/10.1148/radiol.2020200463>
- Champion, K. E., Gardner, L. A., McGowan, C., Chapman, C., Thornton, L., Parmenter, B., McBride, N., Lubans, D. R., McCann, K., Spring, B., Teesson, M., The Health4Life Team, & Newton, N. C. (2020). A Web-Based Intervention to Prevent Multiple Chronic Disease Risk Factors Among Adolescents: Co-Design and User Testing of the Health4Life School-Based Program. *JMIR Formative Research*, 4(7), e19485. <https://doi.org/10.2196/19485>
- Cheng, G., Yang, C., Yao, X., Guo, L., & Han, J. (2018). When Deep Learning Meets Metric Learning: Remote Sensing Image Scene Classification via Learning Discriminative CNNs. *IEEE Transactions on Geoscience and Remote Sensing*, 56(5), 2811–2821. <https://doi.org/10.1109/TGRS.2017.2783902>
- Chick, R. C., Clifton, G. T., Peace, K. M., Propper, B. W., Hale, D. F., Alseidi, A. A., & Vreeland, T. J. (2020). Using Technology to Maintain the Education of Residents During the COVID-19 Pandemic. *Journal of Surgical Education*, 77(4), 729–732. <https://doi.org/10.1016/j.jsurg.2020.03.018>
- De', R., Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International Journal of Information Management*, 55, 102171. <https://doi.org/10.1016/j.ijinfomgt.2020.102171>
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., ... Williams,

- M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 57, 101994. <https://doi.org/10.1016/j.ijinfomgt.2019.08.002>
- Ferentinos, K. P. (2018). Deep learning models for plant disease detection and diagnosis. *Computers and Electronics in Agriculture*, 145, 311–318. <https://doi.org/10.1016/j.compag.2018.01.009>
- Forrester, S. J., Kikuchi, D. S., Hernandez, M. S., Xu, Q., & Griendling, K. K. (2018). Reactive Oxygen Species in Metabolic and Inflammatory Signaling. *Circulation Research*, 122(6), 877–902. <https://doi.org/10.1161/CIRCRESAHA.117.311401>
- Güneş, F. E., Bekiroğlu, N., Imeryuz, N., & Agirbasli, M. (2019). Awareness of cardiovascular risk factors among university students in Turkey. *Primary Health Care Research & Development*, 20, e127. <https://doi.org/10.1017/S146342361900063X>
- Hermawan, B., & Rahyono, F. X. (2019). Ideational meanings of science and interpersonal position of readers in science textbooks for basic level in Indonesia. *Indonesian Journal of Applied Linguistics*, 9(1). <https://doi.org/10.17509/ijal.v9i1.15932>
- Indrawan, G., Paramarta, I. K., Agustini, K., & Sariyasa, S. (2018). Latin-to-Balinese Script Transliteration Method on Mobile Application: A Comparison. *Indonesian Journal of Electrical Engineering and Computer Science*, 10(3), 1331. <https://doi.org/10.11591/ijeecs.v10.i3.pp1331-1342>
- Iyer, P., Aziz, K., & Ojcius, D. M. (2020). Impact of COVID-19 on dental education in the United States. *Journal of Dental Education*, 84(6), 718–722. <https://doi.org/10.1002/jdd.12163>
- Jing, L., & Tian, Y. (2021). Self-Supervised Visual Feature Learning With Deep Neural Networks: A Survey. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 43(11), 4037–4058. <https://doi.org/10.1109/TPAMI.2020.2992393>
- Kim, S., Chen, J., Cheng, T., Gindulyte, A., He, J., He, S., Li, Q., Shoemaker, B. A., Thiessen, P. A., Yu, B., Zaslavsky, L., Zhang, J., & Bolton, E. E. (2019). PubChem 2019 update: Improved access to chemical data. *Nucleic Acids Research*, 47(D1), D1102–D1109. <https://doi.org/10.1093/nar/gky1033>
- Lawrence, J. E., & Tar, U. A. (2018). Factors that influence teachers' adoption and integration of ICT in teaching/learning process. *Educational Media International*, 55(1), 79–105. <https://doi.org/10.1080/09523987.2018.1439712>
- Ma, Y., Hao, Y., Chen, M., Chen, J., Lu, P., & Košir, A. (2019). Audio-visual emotion fusion (AVEF): A deep efficient weighted approach. *Information Fusion*, 46, 184–192. <https://doi.org/10.1016/j.inffus.2018.06.003>
- Mischler, Æ. (2021). Indexing the translation of Fath al-Bari, a multi-volume Islamic classic. *The Indexer: The International Journal of Indexing*, 39(2), 165–182. <https://doi.org/10.3828/indexer.2021.17>
- Miskiah, M., Suryono, Y., & Sudrajat, A. (2019). INTEGRATION OF INFORMATION AND COMUNICATION TECHNOLOGY INTO ISLAMIC RELIGIOUS EDUCATION TEACHER TRAINING. *Jurnal Cakrawala Pendidikan*, 38(1), 130–140. <https://doi.org/10.21831/cp.v38i1.23439>
- M.J, F. R., & Hanggara, Y. (2019). PENERAPAN MODEL PEMBELAJARAN JIGSAW DAN KANCING GEMERINCING DITINJAU DARI MINAT BELAJAR TERHADAP HASIL BELAJAR SISWA KELAS VIII SMP MONDIAL

- BATAM. *PYTHAGORAS: Jurnal Program Studi Pendidikan Matematika*, 8(2).
<https://doi.org/10.33373/pythagoras.v8i2.1904>
- Molinillo, S., Aguilar-Illescas, R., Anaya-Sánchez, R., & Vallespín-Arán, M. (2018). Exploring the impacts of interactions, social presence and emotional engagement on active collaborative learning in a social web-based environment. *Computers & Education*, 123, 41–52. <https://doi.org/10.1016/j.compedu.2018.04.012>
- Murwantini, S. M., Soenarto, S., & Sukardi, T. (2021). Evaluation of Curriculum Implementation at Vocational High Schools in Palangkaraya. *The International Journal of Assessment and Evaluation*, 29(1), 17–25. <https://doi.org/10.18848/2327-7920/CGP/v29i01/17-25>
- Pahayahay, A., & Khalili-Mahani, N. (2020). What Media Helps, What Media Hurts: A Mixed Methods Survey Study of Coping with COVID-19 Using the Media Repertoire Framework and the Appraisal Theory of Stress. *Journal of Medical Internet Research*, 22(8), e20186. <https://doi.org/10.2196/20186>
- Pakatchi, A. (2020). Shi'ism. In D. W. Brown (Ed.), *The Wiley Blackwell Concise Companion to the Hadith* (1st ed., pp. 281–294). Wiley. <https://doi.org/10.1002/9781118638477.ch14>
- Parikhin, P. (2018). Pembelajaran Kooperatif STAD untuk Meningkatkan Kualitas Pembelajaran Praktik Kelistrikan SMK (Studi pada SMK Sriwijaya Karangpucung). *Automotive Experiences*, 1(02), 53–57. <https://doi.org/10.31603/ae.v1i02.2249>
- Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. *Computers & Education*, 147, 103778. <https://doi.org/10.1016/j.compedu.2019.103778>
- Rinninella, E., Raoul, P., Cintoni, M., Franceschi, F., Miggiano, G., Gasbarrini, A., & Mele, M. (2019). What is the Healthy Gut Microbiota Composition? A Changing Ecosystem across Age, Environment, Diet, and Diseases. *Microorganisms*, 7(1), 14. <https://doi.org/10.3390/microorganisms7010014>
- Rohmansyah, R. (2020). Understanding of Polygamy in the Qur'anic Text, Hadith Text, and Biblical Text. *AL-IHKAM: Jurnal Hukum & Pranata Sosial*, 14(2), 317–336. <https://doi.org/10.19105/al-lhkam.v14i2.2529>
- Rusydiah, E. F., Purwati, E., & Prabowo, A. (2020). HOW TO USE DIGITAL LITERACY AS A LEARNING RESOURCE FOR TEACHER CANDIDATES IN INDONESIA. *Jurnal Cakrawala Pendidikan*, 39(2), 305–318. <https://doi.org/10.21831/cp.v39i2.30551>
- Sagi, O., & Rokach, L. (2018). Ensemble learning: A survey. *WIREs Data Mining and Knowledge Discovery*, 8(4). <https://doi.org/10.1002/widm.1249>
- Scott Kruse, C., Kareem, P., Shifflett, K., Vegi, L., Ravi, K., & Brooks, M. (2018). Evaluating barriers to adopting telemedicine worldwide: A systematic review. *Journal of Telemedicine and Telecare*, 24(1), 4–12. <https://doi.org/10.1177/1357633X16674087>
- Shafique, K., Khawaja, B. A., Sabir, F., Qazi, S., & Mustaqim, M. (2020). Internet of Things (IoT) for Next-Generation Smart Systems: A Review of Current Challenges, Future Trends and Prospects for Emerging 5G-IoT Scenarios. *IEEE Access*, 8, 23022–23040. <https://doi.org/10.1109/ACCESS.2020.2970118>
- Sheikholeslami, M., Haq, R., Shafee, A., & Li, Z. (2019). Heat transfer behavior of nanoparticle enhanced PCM solidification through an enclosure with V shaped

- fins. *International Journal of Heat and Mass Transfer*, 130, 1322–1342. <https://doi.org/10.1016/j.ijheatmasstransfer.2018.11.020>
- Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die? *Journal of Business Research*, 117, 280–283. <https://doi.org/10.1016/j.jbusres.2020.05.059>
- Sidhu, G. K., Kaur, S., & Chi, L. J. (2018). CEFR-aligned school-based assessment in the Malaysian primary ESL classroom. *Indonesian Journal of Applied Linguistics*, 8(2). <https://doi.org/10.17509/ijal.v8i2.13311>
- Stanaway, J. D., Afshin, A., Gakidou, E., Lim, S. S., Abate, D., Abate, K. H., Abbafati, C., Abbasi, N., Abbastabar, H., Abd-Allah, F., Abdela, J., Abdelalim, A., Abdollahpour, I., Abdulkader, R. S., Abebe, M., Abebe, Z., Abera, S. F., Abil, O. Z., Abraha, H. N., ... Murray, C. J. L. (2018). Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*, 392(10159), 1923–1994. [https://doi.org/10.1016/S0140-6736\(18\)32225-6](https://doi.org/10.1016/S0140-6736(18)32225-6)
- Supraptiningsih, U., & Bariyyah, K. (2019). Marriage Settlement among Minority Moslem by Datok Imam Masjid in South Thailand. *AL-IHKAM: Jurnal Hukum & Pranata Sosial*, 14(2), 221–236. <https://doi.org/10.19105/al-lhkam.v14i2.2631>
- Susanti, F., Junaedi, D., & Effendy, V. (2019). Communication Learning User Interface Model for Children with Autism with the Goal-Directed Design Method. *2019 7th International Conference on Information and Communication Technology (ICoICT)*, 1–6. <https://doi.org/10.1109/ICoICT.2019.8835395>
- Suswanto, H., Aziz, F. K., Ningrum, G. D. K., & Hamdan, A. (2021). The Development of A PHP-Based Instrument for Attitude Assessment of Learning Outcomes to Improve the Achievement Efficiency of Computer and Network Engineering Students in SMK Negeri 7 Malang. *2021 7th International Conference on Electrical, Electronics and Information Engineering (ICEEIE)*, 1–5. <https://doi.org/10.1109/ICEEIE52663.2021.9616655>
- Tuwoso, T. (2022). Comparison of learning outcomes in metal casting subject using traditional learning model with problem-base learning through SIPEJAR. 030017. <https://doi.org/10.1063/5.0093862>
- Xu, B., Chen, N.-S., & Chen, G. (2020). Effects of teacher role on student engagement in WeChat-Based online discussion learning. *Computers & Education*, 157, 103956. <https://doi.org/10.1016/j.compedu.2020.103956>
- Yang, Y., Lu, Y., Yang, L., Gou, Z., & Zhang, X. (2020). Urban greenery, active school transport, and body weight among Hong Kong children. *Travel Behaviour and Society*, 20, 104–113. <https://doi.org/10.1016/j.tbs.2020.03.001>
- Yii, J., Mahmud, A., Abd Samat, A. H., Sabardin, D. M., Mohd Isa, M. H., Mohd Saiboon, I., & Jaafar, M. J. (2021). A Qualitative Study on Emergency Healthcare Worker (EHCW) Perception towards COVID-ACLS Simulation Training in Resuscitating Suspected COVID-19 Patients. *Sains Malaysiana*, 50(9), 2847–2858. <https://doi.org/10.17576/jsm-2021-5009-27>
- Young, T., Hazarika, D., Poria, S., & Cambria, E. (2018). Recent Trends in Deep Learning Based Natural Language Processing [Review Article]. *IEEE Computational Intelligence Magazine*, 13(3), 55–75. <https://doi.org/10.1109/MCI.2018.2840738>

- Zhang, C., Yang, L., Liu, S., Ma, S., Wang, Y., Cai, Z., Du, H., Li, R., Kang, L., Su, M., Zhang, J., Liu, Z., & Zhang, B. (2020). Survey of Insomnia and Related Social Psychological Factors Among Medical Staff Involved in the 2019 Novel Coronavirus Disease Outbreak. *Frontiers in Psychiatry*, 11, 306. <https://doi.org/10.3389/fpsyt.2020.00306>
- Zhang, L., Wang, S., & Liu, B. (2018). Deep learning for sentiment analysis: A survey. *WIREs Data Mining and Knowledge Discovery*, 8(4). <https://doi.org/10.1002/widm.1253>
- Zhang, S., Zhang, S., Huang, T., Gao, W., & Tian, Q. (2018). Learning Affective Features With a Hybrid Deep Model for Audio–Visual Emotion Recognition. *IEEE Transactions on Circuits and Systems for Video Technology*, 28(10), 3030–3043. <https://doi.org/10.1109/TCSVT.2017.2719043>
- Zoph, B., Vasudevan, V., Shlens, J., & Le, Q. V. (2018). Learning Transferable Architectures for Scalable Image Recognition. *2018 IEEE/CVF Conference on Computer Vision and Pattern Recognition*, 8697–8710. <https://doi.org/10.1109/CVPR.2018.00907>
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