

Revolutionizing Education: Exploring the Quranic Perspective on Online Learning and Its Impact on Modern Education

S. Syukri

Universitas Islam Negeri Mataram

M. Mukhlis

Universitas Islam Negeri Mataram

R. Ruslan

Institut Agama Islam Muhammadiyah Bima

This research explores a unique perspective on online learning as depicted in the Qur'ān, deviating from traditional empirical methods. It delves into the belief that Allah, in the unseen realm, facilitated online learning for prophets like Abraham, David, and Noah through dreams and revelations. The study employs the maudhu'i interpretation method and content analysis, revealing that Allah guided the prophets in implementing online learning in both tangible and intangible realms. Prophet Abraham used parables, David employed demonstration, and Noah embraced a practical approach. Allah intricately monitored the online learning processes, emphasizing the need for students to use props for understanding. The study underscores the importance of qualified instructors incorporating tactile media for effective online learning.

Keywords: online learning, al-Qur'ān, perspective, education, impact

INTRODUCTION

The learning process of the COVID-19 period has passed. Still, the implications are quite heavy for students because, during the online learning process, they tend to have low absorption (Mohd Nordin et al., 2021), less effective (Fakturmen et al., 2021; Rusman et al., 2021), most students in Pakistan say they are lazy, has a negative influence (Hanifah & Firdaus, 2021), and students learning the Qur'ān also show boredom (Yahya et al., 2021) even disabled students in Germany are at risk of dropping out of school at the start of the pandemic (Koopmann et al., 2023). Therefore, according to (Syukri, 2021), the online learning process tends to erode the human factor because it lacks direct interaction. This means that online learning has not obtained maximum learning outcomes and needs to be improved both quantitatively and qualitatively (Raharjo & Suparmi, 2021). This shows a lot of problems with the online learning process and needs a solution, and the solution we offer is the concept of online learning from a props-based Qur'ān perspective (Syukri, 2021) or tactile media.

This study examines three research questions as follows:

- a. What does the Quran say about education, and how can its teachings be applied to modern education, particularly in relation to online learning?
- b. How can the Quranic perspective on online learning be used to develop more effective and culturally-sensitive pedagogical strategies in Islamic and non-Islamic educational contexts?
- c. How can the principles of Islamic education be integrated with modern educational technology to create innovative and effective learning environments that meet the needs of diverse learners?

LITERATURE REVIEW

Theoretically, online learning is a product of Western scientists, but practically it was practiced thousands of years ago by Prophet Abraham, Prophet David, and Prophet Noah, as the Qur'ān explains it.

Online Learning Theory

According to (Trachtman, 1991), online learning is an interaction that shows that interactions replace each other, depending on the funds, materials, objectives achieved, fun, adequate technological tools, and sufficient time. Meanwhile, another expert agreement defines online learning as containing elements of computer or cellphone media-based education, which includes web programs, the internet, and the like, interacting instructors with students, and being in a remote place (Bull et al., 2004; Carliner, 2004). Thus, from the perspective of Western scientists, online learning theory is almost in line with the meaning of the Qur'ānic explanation that online learning theory is carried out without meeting face-to-face between teachers and learners. The Qur'ān calls online learning unseen between Allah giving guidance in the unseen realm with the application of learning materials by Prophet Abraham (Surah 02:260), Prophet David (Surah 21:80), and Prophet Noah (Surah 11:37) in the real world. While Western scientists say, online learning has many terms, such as e-learning, tete-learning, networked learning, virtual learning, and distance learning (Ally & Tsinakos, 2020).

Three Elements of Online Learning

On the implication side, online learning theory shows that if it is successful, it is supported by teacher-learner interaction and content. First, online learning theory must be carried out by three elements, namely instructor, student, and material. According to Anderson, there are three elements involved in online learning interaction: student-teacher; student-student; student-content, but two of them are also tolerable (Anderson et al., 2022; Mardiana, 2023). However, according to the Qur'ān, three elements are still mandatory in online learning interactions, namely teachers, students, and media, as explained in Surah 02:260, Surah 21:80, and Surah 54:13, where Allah is the instructor, Abraham, David, and Noah are the students, and birds, iron, and boards are the media. In principle, Western theorists and Qur'ānic explanations alike demand that the three elements remain during the process of online learning interaction, and the Qur'ān even demands that the three elements must be present.

Learning Tools

Online learning theory requires learning tools. The success of online learning is determined by the various means it has. According to (Azzajjad et al., 2023; Mardiana, 2023; Prensky, 2001), the forms of online learning activities include behavior through duplication of problems, creativity through play - facts through association, practice, recall, and questioning - assessment through reviewing cases, asking questions, making choices, getting feedback, and practice - language through imitation, memorization, practice, and immersion - observation through viewing examples and feedback - procedures through imitation and practice - sharpening the brain through puzzles, cases, and examples - and continuous practice. It seems that online learning activities referred to by Western experts are still limited to narration and imitation of behavior on a computer screen or cellphone. Meanwhile, the Qur'ān has required demonstrative-practical learning activities using objects or learning media according to the material being taught, such as birds in Surah 2:260, iron in Surah 21:80, and boards in Surah 54:13. Therefore, the Qur'ānic

explanation of the use of media names is clear and concrete rather than Western scientists calling media names unclear and vague.

RESEARCH METHODOLOGY

The research approach used is qualitative research in the form of library research. Two sources of data were used in this study, namely verses of the Qur'ān about online learning and educational books and journals in the field.

Design Research

There were two kinds of techniques used to collect data, are; (a) *Maudhu'iy* method was a way of analyzing the themes of the verses of the Qur'ān related to online learning, Allah's miracle of people who are dead but can come back to life, iron as raw material for making armor, and boards as a raw material for shipbuilding (Al-Farmawi, 1994).

Source of Data

There are three sources of data in the al-Qur'an text, namely: (a) Prophet Ibrahim's online learning process about how Allah revives dead humans and then revives them using the parable method in the form of four birds. Prophet Ibrahim chose four birds, then slaughtered them, cut them into small pieces, mixed them, and placed them on four different hills. Then Prophet Ibrahim called the bird, and the bird came in its original form. (b) Prophet David's online learning process on how to make clothes using iron. He first made a pattern of clothes, then looked for iron to soften, cut, sew, and disorder until it formed a shirt for war. (c) Prophet Noah's online learning process on how to make a boat on the mountain by making a boat design, then looking for selected wood that lasts a long time, cutting, and connecting using nails made of wood as well to form a large ship that contains all the remaining humanity on earth in search of salvation in the midst of a great flood befalling all of nature.

Data Collection and Analysis

Researchers traced the verses of online learning and found four verses, namely Surah al-Baqarah verse 260, Surah al-Anbiyā' verse 81, and Surah Hud verse 36-37. These four verses are then analyzed by interpreting according to the meaning of the text, context, and who is involved in online learning. First, surah al-Baqarah/2 verse 260. This verse is identified as an online learning verse of Prophet Ibrahim with Allah. The message of this verse is that dead humans can come back to life. This statement is supported by Surah Yāsin/36:78-79, Surah al-Baqarah/2:73, and Surah al-Maidah/5:110. How to revive a dead person, only Allah knows and is supported by Surah al-Qomar/54:50, surah Yasin/36:85, surah al-Imrān/3:59, and Surah an-Nahl/16:77. Second, surah al-Anbiyā'/21 verse 80. This verse is identified as a verse of David's online learning with God. The message of David's online learning is that David succeeded in making clothes using iron. The verses that support Prophet David's practice are surah Saba'/34:10, surah al-Hadid/57:25, surah al-Baqarah/2:251, and surah Sad/38:17. Third, Surah Hud/11 verses 36-37. This verse is identified as Noah's online learning verse with Allah. Noah's online learning message is that Noah successfully made a ship out of wood. The verses that support Noah's practice are Surah al-Qomar/54:13-15 and Surah ash-syuarā/26:119.

Furthermore, the researcher used thematic analysis to analyze the text of the online learning verses. Thematic analysis is a method for identifying, analyzing, and reporting themes in data (Braun & Clarke, 2006).

RESULT AND DISCUSSION

Allah's Online Learning With Prophet Abraham

The pattern of online learning between Allah and Prophet Abraham is revealed in Surah al-Baqarah verse 260, where Allah teaches Prophet Abraham in the unseen realm or Prophet Abraham meets Allah

will call humans from their respective graves, and we will come one by one to face Allah, like the birds that humans rise from the grave. Related to birds as a parable in the context of Prophet Abraham's occult online learning using props is one of the concepts of parable learning models in the Qur'an. The results of research by (Qasim et al., 2022) proved that the Qur'an contains many concepts of parables about God's power and has a different narrative style according to the problem.

Allah's Online Learning With the Prophet David

Allah's online learning pattern with Prophet David can be traced in Surah al-Anbiya' verse 80. In that verse, Allah taught Prophet David how to sew clothes made of iron for the purpose of defending himself in battle. The explanation of the learning process is as Allah said:

وَعَلَّمْنَاهُ صَنْعَةَ لَبُوسٍ لَكُمْ لِتُحْصِنَكُمْ مِنْ بَأْسِكُمْ.

Meaning: "We taught him the craft of making coats of mail so that you might have protection in your war." (Zayid, 1980).

According to the verse above, there is a learning process between Allah and the Prophet David that takes place online occultly. The spirit of the Prophet David entered the unseen realm through a dream to meet Allah in order to obtain revelations related to the skills of making clothes from iron for the needs of personal shields in war. Furthermore, to realize the revelation instructions, the Prophet David practiced how to make clothes from iron. The first step after Prophet David woke up from sleep was to get iron and soften it. The need for iron that can be softened for the purposes of making clothes, it turns out that Allah has given permission to the Prophet David to soften the iron according to his will. Allah says, which means: And indeed We have given David a gift from Us. (We said): "O mountains and birds, praise repeatedly with David," and We have softened iron for him (Surah Sabā'/34:10). The hint that iron can be softened and shaped for any purpose shows that the time of Prophet David was the first time iron began to be utilized for the life of mankind (Syukri, 2016). In Surah al-Hadid verse 25, Allah says which means "And We created iron in which there is great strength and various benefits for humans, (so that they use the iron) and so that Allah knows who helps (His religion) and His messengers while Allah is not seen. Indeed, Allah is the Strongest, the Mightiest" (Surah al-Hadid/57:25). One of the benefits that Prophet David really needed at that time was the making of armor for the purpose of defending himself in battle. To make the armor, David designed the pattern and measured it until the clothes could be worn (Syukri, 2016), and Allah is always guiding directly in the supernatural about the process of making armor from start to finish. And the symbol of armor in the Quran symbolizes that the Prophet David had power as King, in line with the prominent story in Christian circles known as King David, who had power. Thanks to the success of making the armor, David was able to defeat Goliath (surah al-Baqarah/2:251), and for his patience and obedience to Allah, he was given strength (Surah Sad/38:17). The research results of Desnitsky (2019) that King David was the founder of the Empire (a monarchical state with its capital in Jerusalem) is considered an epic hero and the first King of all the tribes of Israel. As such, the Prophet David was among the messengers of Allah who possessed expertise during his lifetime. This proves the linguistic relationship of the story of the great flood at the time of Noah in Israelite literacy works with the book of Joshua and the book of Deuteronomy.

Allah's Online Learning With Prophet Noah

Explicitly in Surah Hud verse 36, Allah conveyed revelation to Noah about the sadness of many of his people who disbelieved. In Surah Hud verse 37, Allah clearly taught Noah about shipbuilding orders and remained under the supervision of Allah in the unseen. Allah said this (Surah Hud/11:37):

وَأَصْنَعِ الْفُلَکَ بِأَعْيُنِنَا وَوَحِّينَا وَلَا تَخْطِبْنِي فِي الَّذِينَ ظَلَمُوا إِنَّهُمْ مُّعْرَفُونَ.

Meaning: "Build an ark under Our watchful eyes, according Our bidding. Do not plead with Me for the wrongdoers: they shall all be drowned." (Zayid, 1980).

In the description of the verse above, Allah gives a very clear command to Noah to immediately make a ship and always under His supervision. Even in Surah al-Mukminūn/23 verse 27, Allah reinforced His revelation that Noah should immediately build a ship. This shows that Allah's command is very important and should be done immediately. Based on the guidance of Allah's revelation in the unseen realm, Noah immediately worked on the most important project. The main step Noah took was to look for raw materials in the form of wood. And Allah has provided wood as raw material for making ships and their nails. In the surah al-Qomar/54:13, Allah explains, which means "*And We carried Noah in a vessel built with planks and nails.*" This verse signaled to Noah that the ship was made of planks made of wood, and nails made of wood were needed to strengthen the joints. Thanks to the existence of these raw wood materials, the ship was successfully made, and the shipbuilding process was always under the supervision of Allah in the occult online. After the ship was completed, the flood immediately came as Noah and his people boarded the ship to save themselves from the flood (Surah ash-syuarā/26:119). The results of research by (Adamczewski, 2021) prove the linguistic relationship between the story of the great flood at the time of Noah in Israelite literacy works with the book of Joshua and the book of Deuteronomy. Thus, Prophet Noah succeeded in making ships from wood thanks to Allah's guidance through occult online learning.

Thus, based on the process of online learning in the Qur'ān, a learner continues to use tactile media at the place where he learns to practice the material he is learning, even if the teacher is not present. The Qur'ān requires teachers or lecturers to explain learning materials accompanied by props to clarify student understanding and strengthen long-term memory. However, Western experts' online learning theory does not require teaching aids but tactile media in general, as (Hrastinski, 2009) said that theoretically, online learning must be supported by physical devices, not recognizing speaking and writing activities. In this case, Western experts' product online learning theory only mentions physical devices in general. Even the results of research on the impact of visual online learning tend to students or learners only take notes. (Yusnilita, 2020) research results prove that 85% of students out of 20 interviewees admitted to always preparing for learning by taking notes or recording. Therefore, it is appropriate that Saudi Arabia students do not like online learning. The results of research by (Alenezi et al., 2010) showed that the majority of students in Saudi Arabia are still unwilling to use online learning systems. They feel anxious about computers, feel bland, and less happy with computers.

The presence of the concept of online learning from the perspective of al-Qur'ān offers a new nuance accompanied by props or tactile media. Empirical data on the results of online learning in the Qur'ān all use tactile media or learning aids. Prophet Abraham proved the word of Allah that dead humans can come back to life using the parable method in the form of birds. Prophet David sewed clothes using iron. Prophet Noah made a ship with boards using the practical method.

The success of the Prophets in carrying out real learning scenarios in the natural world is due to learning while practicing according to the props that have been prepared and according to the material being studied. In this case, this concept is closely related to the concept of learning by doing, found by John Dewey. According to Dewey quoted by (Vescan, 2019), the concept of learning by doing is that learning should be practical, not passive. The results of Vescan's research prove that the learning-by-doing approach in device-based or tool-based teaching in the form of posters and project-based is very effective and needs to continue to be applied. Similarly, (Surahman & Fauziati, 2021) stated that the concept of learning by doing is learning to do something actively pragmatically, and students need to be involved in the learning process. Their research results prove that students are very active and earnest in learning. In addition, the concept of learning by doing applied in online learning provides a strong understanding and motivation. The results of research by (Iftikhar et al., 2022; Learning et al., 2022) proved that learning by doing gives students the opportunity to practice and use props while doing so that it creates strong motivation and understanding. Even online learning that involves props in the form of robots produces strong performance. The research results of (Stone et al., 2020) proved a new method of online learning based on the Gaussian Process Latent Variable Model (GP-LVM), in which a robot learning from tactile data while performing a contour-following task has efficient and robust task performance.

Based on empirical data in the Quran and applications from researchers in various countries around the world, the concept of tactile media-based online learning has good reliability. Thus, there are three

important messages of online learning in the Qur'ān, namely; (1) the teacher or instructor is obliged to explain the material and give clear instructions with the support of learning aids; (2) students are obliged to provide their own teaching aids according to the material; (2) students touch learning aids and demonstrate teaching aids according to the material they are learning. In the context of online learning, according to the Qur'ān, Allah is positioned as a facilitator by providing a number of instructions about what learners must prepare teaching aids and how the process of students using these teaching aids has all been guided by Allah directly through the unseen realm. And almost all teachers and lecturers around the world take the position of facilitator when implementing the online learning process. The results of (Simamora & Tangkin, 2022) prove that teachers as facilitators, especially in online learning, are assisting, directing, listening, and providing time for students. The research result of (de Santana et al., 2010) proved that facilitators can guide the use of remote-based software in order to build students' knowledge needed to solve problems. The following research results reinforce previous findings that the role of educators as facilitators in online or virtual learning is crucial in ensuring student engagement and interactivity (D'Agustino, 2016; Zohreh & Mohammad Reza, 2013). Although Western and Eastern scholars implement media-based online learning processes, there is no emphasis on the use of teaching aids according to the material. Therefore, there are two advantages of the concept of online learning in the Qur'ān in that it requires props or tactile media in every learning process, even though the material is invisible and abstract. First, using tactile media is very relevant to the mission and direction of learning for millennial learners who demand media as the main learning tool. According to (Chouvardas et al., 2008), tactile is a sensation felt by the sense of touch and is based on skin receptors. Touch is a common medium used by both the general population and people with sensory impairments. In neuroscience, tactile media originates from the skin and then sends and processes information on the sensation of skin touch to the parietal nerve network in the cerebrum (GREDLER, 2009). Thereby, the concept of tactile media-based online learning paves the way for a new generation of better online learning models. The findings of the study by (Stone et al., 2020) prove that simple online learning using robots learning from tactile data paves the way for a new generation of powerful, fast, and data-efficient tactile systems. Even according to (Wu et al., 2020) that smart active tactile sensors can be used to become functional elements for artificial intelligence. Compare with the results of (Levio et al., 2022) showed a significant increase in knowledge about stunting in the intervention group, namely mothers who used audio visuals compared to the control group who only used posters. This means that learning using posters is faster to understand than just being told to watch videos.

Second, the online learning process that produces long-term memory for learners is by touching the props according to the material they learn. The results of interviews with 30 6th-semester students majoring in Islamic Education at the Faculty of Tarbiyah and Education, Mataram State Islam University of Indonesia, prove that they have a good understanding and strong long-term memory of the material they learned online in the 5th semester of November 2022. The results of interviews with students include: Rizki Amelia said I still remember the props of group 11 that were demonstrated online were soil, flour, photos of Prophet Isa, miniature goats related to the material of various props of Islamic religious education (Interview, February 21, 2023). Similarly, Abdurrahman said that the types of Islamic religious education teaching aids that must be touched during online lectures are flour, pictures of the Prophet Isa, goat miniatures, and soil (Interview, February 22, 2023). Furthermore, the results of an interview with Yunia Wulandari said that the props that I understand as conveyed by the speaker, the props have their respective meanings, flour is likened to dog saliva (unclean), miniature goats to explain the nisab of zakat that must be issued, soil as a tool to purify unclean, and a picture of the Prophet Isa as proof of the face of the Prophet Isa (Interview, February 23, 2023). Results of the study by (Agostinho et al., 2016) found that the use of finger gestures on touch screens has the potential to support learning when the gestures are aligned with what is being learned. This shows that, in general, online learning is based on electronic technology and is quite effective (Björger & Fritze, 2020; Rini & Sawitri, 2020; Sofiana et al., 2022). Although some of the online learning outcomes are still centered on text studies and have fairly good learning performance (Cheng et al., 2021; Lumban Gaol et al., 2022), evidence of student engagement in learning descriptive text through online learning to meet student needs and using meaningful examples. This means that online learning is still limited to the study of text and not to the touch of props, and in the future online learning

will need tactile media. Based on the two advantages mentioned above, the concept of online learning based on tactile media from the perspective of the Qur'ān should be a solution for online learning processes worldwide in the 21st century and the next century.

CONCLUSION AND IMPLICATION

There are four main conclusions derived from this research. First, the concept of online learning in the Qur'ān requires tactile media. The concept of online learning in the Quran provides a clear direction that tactile media is a special media that must be touched by learners according to the material so teachers, lecturers, instructors, and education officials prepare and fulfill the needs of tactile learning aids. Thus, the teacher or instructor explains the material with the help of props as an explanation of the material. These findings are supported by the research results of various universities (Abdulrahaman et al., 2020; Anderson et al., 2022; Fiock, 2020; Herath et al., 2021; Ismail, 2022; Zhang, H., Zhang, 2021).

Secondly, material that is supernatural and abstract can be explained using tactile media. The concept of online learning in the Quran requires students to touch props according to the material, even though the material is occult and abstract. The method uses the parable method, such as the problem questioned by the Prophet Ibrahim, a dead human being, then can live again and is demonstrated in the form of a bird. The research results of Western literary thinkers prove that they generally make parables limited to animals and humans (Korhonen, 2019; Malewitz, 2017; Pache, 2016). While Allah makes parables of various kinds of animals, trees, stones, rainwater, and so on, even unseen things, such as angels, are compared to adult men, and heaven is compared to a garden in which there are fruits and rivers.

Thirdly, students can practice the knowledge taught by the teacher or lecturer by using the tactile media themselves at home and in their surroundings. This finding is supported by research results from lecturers and teachers of various educational institutions (Avega Tri Regista Nurrega & Aisyah Mutia Dawis, M.Kom., 2022; Phutane et al., 2022; Ramli et al., 2021; Variyasova et al., 2021).

Fourthly, the concept of online learning using tactile media strengthens long-term memory. These findings are supported by the results of interviews with 30 students that they still remember the material learned online six months ago using parable props.

The implications of the concept of online learning for the world of education emphasize that for students who learn online or remotely without a teacher or instructor in front of them, then the presence of learning aids for each material becomes an absolute thing and a guarantee that students will still gain knowledge with high understanding and strong memory. There are four implications for the application of online learning in education, such as: First, the concept of online learning based on tactile media in the perspective of the Qur'ān based on tactile media needs to be continuously socialized throughout the world. Secondly, teachers, lecturers, and instructors must prepare themselves and be responsive to the needs of the learners who act as facilitators, provide teaching aids in the form of tactile media and have the potential to provide a good understanding of learners. Thirdly, learners must demonstrate and touch the learning props. Fourth, school officials provide a special budget to procure various learning media, especially tactile media, in all teaching materials.

LIMITATIONS

There are some limitations in this study. Admittedly, there are limitations in quoting the opinions of mufasirs about the interpretation of verses related to the concept of online learning in the Qur'ān and Muslim learning experts. The opinions of these experts can complement the limitations of this study in order to perfect the concept of online learning in the Qur'ān that is more comprehensive and also review the opinions of Muslim experts about online-based education and learning, especially online learning in the Qur'ān with tactile media nuances. The results of research by (Landrum et al., 2021) showed that graduate students' satisfaction with online classes evidenced they were concerned about the time and space limitations of online learning, self-motivation, and the role of others, including fellow students and teachers.

REFERENCES

- Abdulrahman, M.D., Faruk, N., Oloyede, A.A., Surajudeen-Bakinde, N.T., Olawoyin, L.A., Mejabi, O.V., . . . Azeez, A.L. (2020). Multimedia tools in the teaching and learning processes: A systematic review. *Heliyon*, 6(11), e05312. <https://doi.org/10.1016/j.heliyon.2020.e05312>
- Adamczewski, B. (2021). Noah's ark and the ark of the covenant. *Collectanea Theologica*, 91(2), 5–19. <https://doi.org/10.21697/CT.2021.91.2.01>
- Agostinho, S., Ginns, P., Tindall-Ford, S.K., Mavilidi, M.-F., & Paas, F. (2016). *'Touch the screen': Linking touch-based educational technology with learning - A synthesis of current research*.
- Alenezi, A.R., Karim, A.M.A., & Veloo, A. (2010). An empirical investigation into the role of enjoyment, computer anxiety, computer self-efficacy, and internet experience in influencing the students' intention to use e-learning: A case study from Saudi Arabian governmental universities. *Turkish Online Journal of Educational Technology*, 9(4), 22–34.
- Al-Farmawi, A. A.-H. (1994). *Metode Tafsir Mawdu'iy Suatu Pengantar* (1st Ed.). Raja Grafindo Persada.
- Ally, M., & Tsinakos, A. (2020). Mobile learning in higher education. In *Proceedings of the 16th International Conference Mobile Learning 2020, ML 2020*. [https://doi.org/10.29121/granthaalayah.v5.i4\(se\).2017.1942](https://doi.org/10.29121/granthaalayah.v5.i4(se).2017.1942)
- Anderson, L.S., Carter, M.J., & DiRenzo, A.A. (2022). Online Teaching and Learning: Perspectives of Faculty and Students from the Cyber-Trenches. *SCHOLE: A Journal of Leisure Studies and Recreation Education*, 37(1–2), 112–122. <https://doi.org/10.1080/1937156X.2021.1897901>
- Azzajjad, M.F., Halima, H., Rahayu, A., & Ahmar, D.S. (2023). Treffinger Learning Model Assisted by PPT Media is it Affects Student Learning Outcomes? *Athena: Journal of Social, Culture, and Society*, 1(2), 50–57. <https://doi.org/10.58905/ATHENA.V1I2.17>
- Björge, A.M., & Fritze, Y. (2020). When student-activating teaching conflict with students' desire for efficiency. A communication perspective on undergraduate students' media use. *Seminar.Net*, 16(2), 19. <https://doi.org/10.7577/seminar.4049>
- Bull, S., Bridgefoot, L., Corlett, D., Kiddie, P., Marianczak, T., Mistry, C., . . . Williams, D. (2004). Interactive Logbook: The development of an application to enhance and facilitate collaborative working within groups in higher education. *MLEARN 2004: Learning Anytime, Everywhere*, 39.
- Carliner, S. (2004). An Overview of Online Learning (2nd Ed.). *European Business Review*, 16. <https://doi.org/10.1108/09555340410561723>
- Cheng, N., Zhao, W., & Xu, X. (2021). Research on Online Learning Behavior Supported by Learning Analysis Technology. *2021 Tenth International Conference of Educational Innovation through Technology (EITT)*, 266–270. <https://doi.org/10.1109/EITT53287.2021.00059>
- Chouvardas, V.G., Miliou, A.N., & Hatalis, M.K. (2008). Tactile displays: Overview and recent advances. *Displays*, 29(3), 185–194. <https://doi.org/https://doi.org/10.1016/j.displa.2007.07.003>
- D'Agustino, S. (Ed.). (2016). *Creating Teacher Immediacy in Online Learning Environments*. IGI Global. <https://doi.org/10.4018/978-1-4666-9995-3>
- de Santana, W.J.F., Mota, A., Mota, L.T.M., & Liesenberg, H.K.E. (2010). The Facilitator-Supported Online Method: Using Problem-Based Remote Learning Techniques for Engineering Students. *2010 IEEE Transforming Engineering Education: Creating Interdisciplinary Skills for Complex Global Environments*, pp. 1–15. <https://doi.org/10.1109/TEE.2010.5508877>
- Fakturmen, F., Ningrum, D., Masruroh, S., Arrofa, N., Rizal, A., & Suparta, M. (2021). *Explorative Study on the Impact of Pandemic Covid-19 on Online Learning of the First Middle School of Cibeuteung Muara Village*. <https://doi.org/10.4108/eai.20-10-2020.2305179>
- Fiock, H. (2020). Designing a Community of Inquiry in Online Courses. *The International Review of Research in Open and Distributed Learning*, 21(1), 134–152. <https://doi.org/10.19173/irrodl.v20i5.3985>

- GREDLER, M.E. (2009). Hiding in Plain Sight: The Stages of Mastery/Self-Regulation in Vygotsky's Cultural-Historical Theory. *Educational Psychologist*, 44(1), 1–19.
<https://doi.org/10.1080/00461520802616259>
- Hanifah, U., & Firdaus, N.A. (2021). The Impact of Online Learning Policies on Students' Learning Motivation in the Era of the Covid-19 Pandemic. *Pedagogia: Jurnal Pendidikan*, 11(1), 15–29.
<https://doi.org/10.21070/pedagogia.v11i1.1246>
- Herath, R., Bano, Y., & Shanmugam, V. (2021). E-Learning Capability Maturity During Covid-19 Pandemic -A Qualitative Approach. *Quality - Access to Success*, 22, 232–236.
<https://doi.org/10.47750/QAS/22.184.29>
- Hrastinski, S. (2009). A theory of online learning as online participation. *Computers & Education*, 52(1), 78–82. <https://doi.org/https://doi.org/10.1016/j.compedu.2008.06.009>
- Iftikhar, S., Guerrero-Roldán, A.-E., & Mor, E. (2022). *Practice Promotes Learning: Analyzing Students' Acceptance of a Learning-by-Doing Online Programming Learning Tool*.
- Ismail. (2022). The Implementation of E-Learning Supported by Social Reality Videos in Mobile Applications: Its Impact on Student's Learning Outcomes. *International Journal of Interactive Mobile Technologies*, 16(17), 37–49. <https://doi.org/10.3991/ijim.v16i17.33041>
- Koopmann, J., Zimmer, L.M., & Lörz, M. (2023). The impact of COVID-19 on social inequalities in German higher education. An analysis of dropout intentions of vulnerable student groups. *European Journal of Higher Education*, pp. 1–18.
<https://doi.org/10.1080/21568235.2023.2177694>
- Korhonen, T. (2019). *Anthropomorphism and the Aesopic Animal Fables*, pp. 211–231.
https://doi.org/10.1007/978-3-658-24388-3_10
- Landrum, B., Bannister, J., Garza, G., & Rhame, S. (2021). A class of one: Students' satisfaction with online learning. *Journal of Education for Business*, 96(2), 82–88.
<https://doi.org/10.1080/08832323.2020.1757592>
- Learning, F., Media, U., & Implication, I.T.S. (2022). *FIQH LEARNING USING MEDIA AND ITS IMPLICATION*, 16(1), 65–82.
- Levio, S., Wahyuni, L., & Sasube, L.M. (2022). Audio Visual And Poster As A Media To Improve Mothers' Knowledge About Stunting During Covid-19 Pandemic. *Jurnal Kesehatan Masyarakat Dan Lingkungan Hidup*, 7(2), 158–165. <https://doi.org/10.51544/jkmlh.v7i2.3451>
- Lumban Gaol, N. S., Sibarani, B., & Husein, R. (2022). *Teacher ways to Engage Students in Learning Descriptive Text Through Online Learning*. 1–5. <https://doi.org/10.4108/eai.20-9-2022.2324559>
- Malewitz, R. (2017). Narrative disruption as animal agency in Cormac McCarthy's the crossing. *Philosophical Approaches to Cormac McCarthy: Beyond Reckoning*, 60, 152–167.
<https://doi.org/10.4324/9781315693095>
- Mardiana, H. (2023). Lecturers' Reasoning in Using Digital Technology: A Cognitive Approach in Learning Process. *Athena: Journal of Social, Culture, and Society*, 1(2), 33–42.
<https://doi.org/10.58905/ATHENA.V1I2.27>
- Mohd Nordin, N., Koe, W.-L., Mohamed, M., Md Taib, N., & Sapuan, N.A. (2021). Determinants of the Effectiveness of Online Learning among University Students during Covid-19 Crisis. *International Journal of Academic Research in Business and Social Sciences*, 11(5), 560–568.
<https://doi.org/10.6007/ijarbss/v11-i5/10010>
- Nurrega, A.T.R., & M.Kom., A.M.D. (2022). TRAINING in MAKING INNOVATION INTERACTIVE LEARNING MEDIA FOR TEACHERS OF SMAN KARANGPANDAN. *JCOMENT (Journal of Community Empowerment)*, 3(3), 136–143. <https://doi.org/10.55314/jcoment.v3i3.277>
- Pache, C. (2016). Mourning Lions and Penelope's Revenge. *Arethusa*, 49(1), 1–24.
<https://doi.org/10.1353/are.2016.0003>
- Phutane, M., Wright, J., Castro, B.V., Shi, L., Stern, S.R., Lawson, H.M., & Azenkot, S. (2022). Tactile Materials in Practice: Understanding the Experiences of Teachers of the Visually Impaired. *ACM Trans. Access. Comput.*, 15(3). <https://doi.org/10.1145/3508364>

- Prensky, M. (2001). The Games Generations: How Learners Have Changed. *Computers in Entertainment*, 1(1), 1–26.
- Qasim, M., Candidate, D., Studies, I., & Kashmir, A. (2022). ك : بسلا تمثیلی كا مجید ن ار ق بر نجا تحقیقی. *یا*, III(2), 74–90.
- Raharjo, & Suparmi, M. (2021). Analysis of the Weakness to The Implementation of Online Learning During the Covid-19 Pandemic In the City of Surabaya, Indonesia. *Journal of Physics: Conference Series*, 1899(1), 12166. <https://doi.org/10.1088/1742-6596/1899/1/012166>
- Ramli, R.Z., Ramli, A.H., Osman, N., Ismail, Z., Musa, M., & Satari, H. (2021). Online Learning: Insight into Malaysia University Lecturers' Perspective. *International Journal of Academic Research in Business and Social Sciences*, 11(2), 1250–1258. <https://doi.org/10.6007/ijarbs/v11-i2/9201>
- Razi, Fakhr al-Din ibn al-Allamah Diya al-Din Umar, M. al-. (2021). *Tafsir al-Fakhr al-Razi: Tafsir al-Kabir wa Mafatih al-Ghayb* (1st Ed.). Dar al-Fikr.
- Rini, H.P., & Sawitri, D.K. (2020). *Overview of online learning*.
- Rusman, T., Maskun, M., & Suroto, S. (2021). *Constraints to the Application of Online Learning during the Covid-19 Pandemic*. <https://doi.org/10.4108/eai.16-10-2020.2305258>
- Simamora, K., & Tangkin, W.P. (2022). Guru sebagai Fasilitator dalam Pembelajaran Daring ditinjau dari Perspektif Kristen. *KAPATA: Jurnal Teologi Dan Pendidikan Kristen*, 2(2), 151–165. <https://doi.org/10.55798/kapata.v2i2.28>
- Sofiana, M., Langelo, J.S., Supriyadi, E., Maulina, A., & Wahyuni, R. (2022). Case Study of Digital-Based Service Innovation for Old Age Insurance (JHT) Claims by BPJS Employment (BPJAMSOSTEK) Pekalongan Branch Office Central Java. *Ilomata International Journal of Management*, 3(1), 327–342.
- Stone, E.A., Lepora, N.F., & Barton, D.A.W. (2020). Learning to Live Life on the Edge: Online Learning for Data-Efficient Tactile Contour Following. *2020 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, pp. 9854–9860. <https://doi.org/10.1109/IROS45743.2020.9341565>
- Surahman, Y.T., & Fauziati, E. (2021). Maksimalisasi Kualitas Belajar Peserta Didik Menggunakan Metode Learning By Doing Pragmatisme By John Dewey. *Jurnal Papeda: Jurnal Publikasi Pendidikan Dasar*, 3(2), 137–144. <https://doi.org/10.36232/jurnalpendidikandasar.v3i2.1209>
- Syukri. (2016). *Tafsir Ayat-ayat Pembelajaran dalam al-Qur'an*. Madani Institute.
- Syukri. (2021). TEORI BELAJAR AL-BAYĀN BERBASIS AL-QUR'AN. In *Sanabil* (Vol. 1). Routledge. <https://doi.org/10.1080/21568235.2013.833405>
- Trachtman, R. (1991). Educational Computing Foundations. *Journal of Research on Computing in Education*, 23(3), 470–471. <https://doi.org/10.1080/08886504.1991.10781975>
- Variyasova, E., Ivanova, E., & Karnyushina, V. (2021). Video lecture as an example of digital technologies implementation in the educational process of the university. *Bulletin of Nizhnevartovsk State University*, pp. 116–123. <https://doi.org/10.36906/2311-4444/21-1/16>
- Vescan, A. (2019). Does Learning by Doing Have a Positive Impact on Teaching Model Checking? *Proceedings of the 1st ACM SIGSOFT International Workshop on Education through Advanced Software Engineering and Artificial Intelligence*, pp. 27–34. <https://doi.org/10.1145/3340435.3342717>
- Wu, C., Kim, T.W., Park, J.H., Koo, B., Sung, S., Shao, J., . . . Wang, Z.L. (2020). Self-Powered Tactile Sensor with Learning and Memory. *ACS Nano*, 14(2), 1390–1398. <https://doi.org/10.1021/acsnano.9b07165>
- Yahya, W.B.M.H.M., Rahman, T., Siddiq, A.A., & Parihat. (2021). Online learning in the Quran reading class during Covid-19 pandemic. *International Journal of Learning, Teaching and Educational Research*, 20(5), 142–158. <https://doi.org/10.26803/IJLTER.20.5.8>
- Yusnilita, N. (2020). The Impact of Online Learning: Student's Views. *ETERNAL (English Teaching Journal)*, 11(1), 57–61. <https://doi.org/10.26877/eternal.v11i1.6069>
- Zayid, M.Y. (1980). *The Quran ; An English Translation of the Meaning of the Qur'an*.

- Zhang, H., & Zhang, L. (2021). Construction and Practice of Basic Teaching Organization based on Curriculum Group. *International Journal of Social Science and Education Research*, 4(3), 63–66.
[https://doi.org/10.6918/IJOSSE.202-103_4\(3\).0011](https://doi.org/10.6918/IJOSSE.202-103_4(3).0011)
- Zohreh, K.L., & Mohammad Reza, K.L. (2013). Teacher roles and online learning. *4th International Conference on E-Learning and e-Teaching (ICELET 2013)*, pp. 121–124.
<https://doi.org/10.1109/ICELET.2013.6681658>