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## Educational Transformation during the Pandemic in the Learning Process

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### **Abstract**

*The COVID-19 pandemic has impacted various aspects of life, including the education sector. The educational process at the State Islamic Institute (IAIN) Kerinci has also experienced quite significant changes, where the learning method has shifted from face-to-face to online learning. There is still not much research that discusses the correlation between the impact of Covid-19 and the mental and physiological health of students. This study aims to evaluate the impact of the pandemic on changes in the education system at IAIN Kerinci, with a particular focus on the challenges and opportunities that arise from the implementation of online learning. Through observation and questionnaires, this study involved lecturers and students to gain direct insight into the experiences and obstacles they face during the online learning process. The results of the study indicate that changes in education at IAIN Kerinci are faced with several problems, such as limited internet access, lack of digital skills, and low success rates in online learning. The world of education has changed rapidly due to the COVID-19 pandemic. This requires flexibility and innovation in the learning process despite the many challenges that must be faced. Further evaluation is needed to assess the effectiveness of online learning and the potential for sustainable development of educational technology at IAIN Kerinci.*

**Keywords:** COVID-19 Pandemic, Educational Transformation, Online Learning.

### **PRELIMINARY**

In the education system, the COVID-19 Pandemic has changed certain views of essentially any educator of distance learning which is a new and strange idea centered around the concept. This transition has affected values, the principles of Islamic education and the principles of character education. Samani (2012) characterizes character as a holistic person character that touches on character with God, with fellow human beings, the environment, and the rules of society. The pandemic has shaken up a lot of things, including the education sector, and such changes affect our children's psychology and character building. The measure of COVID-19 impact on a child's character can be assessed using character education. It is done by several activities, such as performing courses, learning motivation, and time management (Restu, 2020).

Each individual has different levels of knowledge, which can generally be categorized as knowing, understanding, applying, analyzing, synthesizing, and evaluating (Listiani, 2015). Learning is one way to gain knowledge and broaden one's horizons. The learning process can increase knowledge and broaden one perspective (Listiani, 2015). The result is a change in behavior the higher a person knowledge, the better their behavior (Listiani, 2015). Research on educational transformation during the COVID-19 pandemic, especially in Indonesia and at the Kerinci State Islamic Institute (IAIN Kerinci), has highlighted various changes and challenges in the learning system. One major transformation is the shift to online learning, which utilizes technology as a bridge between teachers and students. Although technology has facilitated the teaching and learning process, challenges remain, especially in terms of infrastructure, such as uneven internet access and the lack of readiness of educators and students to manage online learning (Ananda, 2021). Studies show that technology plays a central role in maintaining the continuity of education during the pandemic. Platforms such as Zoom, Google Classroom, and Learning Management

Systems (LMS) are dominant. However, significant challenges arise, especially in remote areas with limited access to technology, resulting in uneven learning outcomes across regions (Ferdin, 2021).

In addition, research reveals an impact on the quality of education. Younger students, such as elementary school students, find it more difficult to adapt to online learning. Other challenges include decreased motivation to learn due to limited interaction with teachers and lack of direct guidance (Sinta, 2021). For institutions such as IAIN Kerinci, this underscores the importance of improving digital literacy and providing facilities that support online learning in the future. Proposed solutions include increasing technology training for teachers and students and increasing internet access in remote areas (Pahril, 2020).

The aim of this research is to examine significant changes in education caused by the pandemic. Traditional face-to-face learning has shifted to distance learning (online), which brings many new news. We desire to understand how these changes impact students, educators and the quality of education. We also try to explain how IAIN Kerinci has used technology to support distance learning. Are there any obstacles, such as limited internet access or devices, and how are these challenges overcome? We believe this study is important for understanding the long-term impact of the outbreak on education and assessing whether the approaches implemented during the outbreak can be used in the future. In addition, this research aims to provide suggestions on how educational institutions can prepare for a similar crisis in the future.

## METHOD

This study uses a qualitative research design with a case study research type. This type of case study research uses empirical evidence to prove that the theory of the impact of the covid 19 pandemic on the learning process at IAIN Kerinci. The data collection format or data sources in this study are a combination of interviews, articles, and literature studies. In this study, the data collection technique in this study uses interview data sources and literature studies. Data from case studies consist of a combination of interviews, papers, and literature. This study uses an interpretive approach emphasizing the perceptions of researchers and informants in responding to a problem. Observation: This method was used to directly observe the phenomena in the field. The researcher recorded respondents' behavior, interactions, and environmental context. This observation helped understand dynamics not verbally expressed by the respondents. Questionnaire: The questionnaire was specifically designed for this study and used to collect additional data. Using Google Forms to distribute the questionnaire made data distribution and collection easier. In addition to covering key elements of the study, the questionnaire included a Likert scale to measure respondents' level of agreement or disagreement with various statements. By combining qualitative data from observations and quantitative data from the questionnaire, these two approaches are expected to yield a more in-depth analysis of the research subject.

## FINDINGS AND DISCUSSION

### *Findings*

#### *Challenges in Online Learning*

Based on the study findings, limited internet access is one of the main obstacles faced by students and lecturers in implementing online learning at IAIN Kerinci. Many students from remote areas have trouble in obtaining a stable internet connection, which often prevents them from smoothly attending online classes (Firmansyah, 2021). This inadequate connectivity affects their access to course materials and limits their participation in online class discussions and group assignments. According to Hidayat (2020) study, the lack of internet infrastructure in certain areas has caused educational access gaps during the pandemic, and this issue is also experienced by university students, especially those outside the main urban areas.

In addition, internet data costs are another obstacle for students, especially those from low-income backgrounds. Since most classes are conducted online, students are forced to spend extra worlds to purchase internet data. Research by Rini and Subekti (2022) shows that the world of internet data packages has become a financial burden for students during the pandemic, causing some to choose to drop out of class if they do not have sufficient data. These difficulties show that economic challenges have also had a significant impact on student engagement in the online learning process. In addition to the issue of internet access, limited access to technological devices also poses a considerable challenge. Not all

students have adequate devices, such as laptops or computers, and many rely only on smartphones with low specifications to access learning materials. According to Setiawan's research (2021), the lack of technological devices makes it difficult for students to access material or take online tests that require high memory capacity and graphic display. This research also shows that students with basic devices often experience difficulties when using video conference applications or downloading large study material files.

Reliance on smartphones also limits students' ability to complete assignments that require more advanced devices, such as editing documents or creating presentations. Research by Wulandari (2020) shows that devices such as laptops or computers are important for certain tasks that are difficult to complete on smartphones; However, not all students have access to these devices. This shows that technological limitations not only reduce access to online learning but also affect the quality of work produced by students.

The limitation of technology skills among students is also a major obstacle in the implementation of online learning. Some students are still not used to using online learning platforms and other supporting applications, such as Zoom, Google Classroom or Microsoft Teams. Fitriani's research (2022) found that the lack of knowledge about technology is one of the factors inhibiting the effectiveness of online learning, because students need more time to master the features of this platform. This ignorance often causes students to experience difficulties during online learning, so that in the end it affects their understanding of the material.

Low technological mastery causes students to be unable to optimize the function of technology in online learning. According to Pratama research (2021), students who do not understand the use of technology tend to be passive in online learning, because they feel awkward or afraid of making mistakes when handling digital platforms. This lack of skills prevents students from actively participating in class, making it more difficult for them to engage in an effective learning process.

### ***Effectiveness of Online Learning***

The quality of interaction between lecturers and students decreased significantly during online learning at IAIN Kerinci. In face-to-face learning, interaction between lecturers and students takes place directly, allowing for discussion and deeper understanding of the material. However, in online learning, this interaction is limited, and students tend to be more passive. Andini and Prasetya (2021) research found that students were reluctant to interact in online classes because they felt uncomfortable and often felt unheard or unnoticed. This reduces students' active participation, which ultimately affects the quality of their understanding of the material.

In addition, technological limitations in online learning also make interactions not optimal. According to Surya (2020), many students experience technical problems during online classes, such as unclear audio and video interference, which hampers the smoothness of the digital skills learning process among lecturers and teachers. students, making communication and interaction in online learning less effective (Kurniawan, 2022). The limited quality of interaction indicates that online learning is not completely material.

Online learning methods used during the pandemic tend to be less diverse and more focused on text-based tasks and tests. Online learning often relies on video lectures or independent tasks, thus limiting active interaction and in-depth discussion between lecturers and students (Rahman, 2021). In their research, Sari and Putri (2020) stated that the dominance of lecture methods and written assignments in online learning causes boredom in students, causing them to be less motivated to learn. The lack of differences in these methods shows that the current online learning methods are not fully effective in maintaining the interest and active participation of students.

Assessing online learning also poses its own challenges, as most assessments are carried out online through freely prepared quizzes or assignments. However, this assessment always only measures basic cognitive abilities without assessing students analytical and critical skills in depth (Lestari, 2022). According to research by Fadhillah (2021), students tend to struggle to demonstrate deep understanding through limited online assessment methods. This limitation makes it difficult for lecturers to assess students' abilities, in fact the learning outcomes achieved by students in online learning may not reflect their true understanding.

Student motivation in online learning tends to decrease compared to face-to-face learning. The less interactive nature of online learning often causes students to feel bored and lose interest in learning. According to research by Pratama and Dewi (2021), many students experience decreased motivation because they feel they do not get direct support from lecturers or peers. This shows that social interaction and the face-to-face classroom environment play an important role in maintaining student learning motivation.

Active student participation also decreases in online learning, students tend to be more passive and only complete tasks as needed. This happens because students feel that online learning is just a formality, so they do not feel encouraged to contribute actively (Wahyuni, 2020). This sense of alienation further reduces the effectiveness of online learning because students cannot interact and discuss directly with lecturers or peers who are usually one of the main motivators in learning. This finding highlights the importance of direct interaction in maintaining active student participation.

### ***Psychological Impact and Student Motivation***

Prolonged online learning during the pandemic has made many students bored and unmotivated. Studying from home without physical interaction with peers and lecturers has deprived students of a conducive learning environment and the social support they usually receive in face-to-face classes. Research by Nugraha and Putri (2021) found that students tend to feel alone when studying online, which creates enthusiasm and motivation to learn. The lack of face-to-face interaction makes students less involved in the learning process, and many are simply present in class to fulfill their academic obligations.

In addition, changes in the learning environment also affect students' mental health. According to Dewi research (2020), students who experience boredom and stress during online learning often have difficulty focusing and concentrating. This is exacerbated by the home environment which may not always be conducive to learning, especially if students must share space with other family members who are also working or studying from home. This situation shows that online learning not only impacts academic aspects but also the mental well-being of students.

Online learning requires good time management skills and independent learning abilities from students, but not everyone is ready to face this challenge. Research by Pratama (2021) revealed that students often struggle to manage their time effectively, especially resulting in a clear lack of balance between study time and free time at home. Students who are not used to self-directed learning tend to have difficulty preparing assignments on time, which ultimately impacts their academic performance.

Independent learning skills are also an important aspect in online learning because lecturers cannot always provide intensive direct guidance like in face-to-face classes. Rahmat (2022) research shows that some students feel less disciplined in following the online learning schedule and are often motivated to procrastinate. The lack of direct supervision in online learning requires students to have greater freedom and responsibility, but many feel unprepared for this challenge. This shows that online learning requires adjustments not only from lecturers but also students in terms of developing self-management skills.

Different learning conditions and limited social interaction during online learning have an impact on students' mental health. Wulandari (2021) research shows that students experience increased stress due to the large number of assignments and demands to adapt to new technologies. This is especially felt by students who do not have online learning experience, causing them to be under pressure to adapt quickly. This stress often affects students work-life balance, making it difficult for them to maintain productivity while maintaining mental health.

*"During this learning period, we receive a lot of assignments, we are required to be more independent because of the limited face-to-face meetings with lecturers. So that sometimes the assignments are not optimal and sometimes staring at the computer monitor screen for too long, the eyes become afternoon"* (informant, 16).

The pressure to stay active in online classes and complete assignments within a limited time frame is also a contributing factor to higher stress levels. Hidayat and Kurniawan (2020) study found that several students felt stressed by assignments given continuously without sufficient rest time. This situation shows that online learning poses a major challenge to student's mental health, especially for those who face



technical constraints and lack of social support. This highlights the importance of paying special attention to student's psychological well-being in online learning.

### ***Readiness of Lecturers and Students in Adapting to Online Learning Technology***

The COVID-19 pandemic has forced lecturers to adapt to online learning technology, but not all lecturers have the same level of willingness. Many lecturers who previously used to teach face to face find it difficult to navigate online learning platforms and digital applications such as Zoom, Google Meet or Learning Management Systems (LMS). According to research by Harsono (2021), some lecturers are struggling to adapt their teaching methods to this new technology, causing the learning process to be less effective. Limited digital proficiency among lecturers also impacts the quality of material delivery, as they require more time to understand the function of the technology used.

In addition, lecturers face challenges in creating an interactive classroom environment in online learning. Research by Utami and Wijayanto (2022) found that lecturers who are not familiar with technology often only give assignments or materials in text format without adequate interaction with students. As a result, students feel less involved and motivated during the online learning process. The readiness of lecturers to utilize technology is a major factor influencing the effectiveness of online learning, emphasizing the need to improve lecturers' digital skills to optimize the learning process.

On the other hand, students are also expected to have sufficient ability to adapt to online learning technology. However, not all students have adequate digital literacy, especially those with limited educational or economic backgrounds. According to research by Pratiwi and Rizky (2020), some students feel uncomfortable and overwhelmed with the various applications they must use for online learning. Lack of technological knowledge makes it difficult for students to access materials, attend classes, and complete assignments effectively.

Students are also challenged to manage their learning independently with the help of technology. Ramadhan (2021) research shows that students who are less skilled in using technology often have difficulty in online learning, especially when accessing materials that require specific devices or a stable internet connection. In addition, some students have difficulty adjusting to interactive features such as online discussions and digital collaboration, which they have never encountered before in face-to-face learning. This highlights that technological readiness involves not only access to devices but also the understanding and skills needed to use technology for independent learning.

To increase willingness for online learning, support in the form of technology training is important for both instructors and students. Some universities have begun efforts to provide training in the use of online platforms, although this is often limited to lecturers and does not fully meet student needs. A study by Lestari and Susanto (2021) shows that regular practice and technical support help lecturers become more willing to teach online, enabling them to understand platform features and resolve technical issues. Such exercises not only improve lecturers' technological skills but also help them in developing more effective teaching methods for online learning.

For students, technology training still lacks attention so many learn to use online learning applications independently. Aulia research (2022) found that students who receive technology support, both through training and guidance from their institution, feel more prepared to follow online learning. The support allows students to become more independent in operating the technology needed, so that it is easier to adapt to the online learning model. Based on that, it is important for educational institutions to not only focus on the technological readiness of their lecturers, but also provide adequate training to their students to help them adapt effectively.

### ***Infrastructure constraints and access to online learning***

Face difficulties in accessing online learning platforms and attending live lectures due to slow and unstable internet speeds. According to research conducted by Wicaksono (2021), inconsistent internet infrastructure in Indonesia is a major obstacle for many regions to implement online learning. When taking online classes in areas with limited internet access, students often experience disruptions that cause them to miss learning materials and have difficulty completing assignments on time.

*“...the obstacle for me is the limited internet connection, sometimes in the middle of learning there are connection problems so that the information we get is sometimes incomplete. especially when the weather is rainy, I who live in a village with a bad connection must experience obstacles?” (informant, 9).*

Students must spend additional costs to buy internet quotas due to limited internet access, which is a challenge for them, especially those from low to middle-income families. Research conducted by Kartika and Nugroho (2020) found that most students feel burdened by the high cost of internet quotas needed for online learning, some of them even must find a place with a stronger signal to attend class. This shows that adequate infrastructure is needed so that online learning can be accessed by all students regardless of financial and geographical limitations.

In addition to the lack of internet access, some students do not have adequate devices, such as laptops or computers, to access online platforms and complete assignments. Many students use smartphones with limited features, making it difficult to access more complex files or applications. According to research conducted by Rahmawati and Kurnia (2021), students who only use smartphones often have difficulty accessing content that requires a larger screen or special applications. This affects students' ability to follow the learning process properly.

Students cannot participate in more interactive learning activities, such as video discussions or online presentations, because they do not have supporting devices. According to research conducted by Suryani (2020), students who do not have supporting devices can often only participate in online classes passively and cannot take advantage of the interactive features available. The limitations of these devices indicate that online learning still faces significant technical problems in Indonesia, especially for students who come from families with limited financial resources.

Uneven electricity availability is an obstacle to online learning, especially for students who live in areas with unstable electricity systems. According to research conducted by Darmawan (2021), frequent power outages in several places make it difficult for students to attend online classes according to schedule and complete assignments on time. Rural areas with inadequate electricity infrastructure often experience power outages. As a result, students living in these areas must face additional challenges when learning via the internet.

Lack of supporting facilities, such as adequate study space at home, is another physical infrastructure barrier. In Lestari (2020) study, many students do not have a comfortable and quiet study space at home. As a result, family activities or loud noises disrupt their concentration. This mismatch shows that some students do not have adequate facilities to support online learning at home, which has an impact on their learning outcomes.

Institutional and government support is essential to address these infrastructure barriers. Several educational institutions have attempted to assist students in need by providing access to educational devices or internet quota packages. Research conducted by Widodo and Susanti (2021) found that these assistance programs were quite helpful for students facing financial problems but could not reach all students in need. Government policies that encourage the development of internet infrastructure in remote areas are also an important step in increasing access to online education.

The government is also responsible for providing the necessary instructions and resources to support the success of online learning. According to Pratama research (2022), collaboration between the government and educational institutions can help overcome some infrastructure barriers by providing the necessary facilities and training. However, these efforts need to be increased so that all students in Indonesia can enjoy online learning without being hampered by infrastructure limitations.

## Discussion

The results of this study indicate that changes in learning methods at IAIN Kerinci have undergone changes post-Covid-19 in the form of blended learning, which is a combination of during and offline. In the context of this study, these findings indicate that there is a significant relationship between online learning methods and significant changes that occur in the world of education, making educational institutions more adaptive to changes in the times and situations. This shows that certain factors have an important role in the implementation of learning at the tertiary level.

Furthermore, the discussion of the findings is described in the following four points, namely (1) Changes in Learning Methods. Learning at IAIN Kerinci has shifted from face-to-face methods to online learning due to the COVID-19 pandemic. (2) Problems Faced, first, limited internet access is one of the main obstacles in online learning. Second, the lack of digital skills from both students and lecturers hinders the effectiveness of learning. Third, the success rate of online learning is relatively low compared to face-to-face learning. (3) Impact on Education, namely the COVID-19 Pandemic has brought significant changes in the world of education, forcing educational institutions to adapt to more flexible and innovative learning methods. Despite the challenges, online learning also opens opportunities for the development of more sustainable educational technology. (4) Need for Further Evaluation. Further evaluation is needed to assess the effectiveness of online learning and identify the potential for developing educational technology at IAIN Kerinci.

However, this study has several limitations, such as the research background focused on one educational institution (case study), did not explore aspects of mental and physiological health, and did not evaluate the effectiveness of online learning in depth. These limitations can affect the validity of the research results, so it is recommended for further research to consider broader methods or more diverse samples so that the research results are more generalizable. Overall, this study makes a significant contribution to understanding the online learning methods implemented at IAIN Kerinci. By considering the results obtained, the findings of this study can be used as a basis for developing policies or practices in the field of learning. Therefore, further research is still needed to confirm and expand these findings in a broader context.

## CONCLUSION

Amid the COVID-19 pandemic, the educational method at the State Islamic Institute (IAIN) Kerinci has undergone major changes. This has caused the university to shift from traditional face-to-face learning to online learning. This sudden shift brings many new challenges and opportunities, especially for lecturers and students who must quickly adapt to digital technology. Studies show that both students and lecturers face difficulties in adapting to online learning, mainly due to limited infrastructure. One of the main obstacles that hinders the teaching and learning process is often unstable internet access, especially in areas with limited networks. In addition, many teachers and students do not have the technological devices needed to take online classes, such as laptops or smartphones. Lack of teaching and guidance on the use of learning technology is also a common problem. This makes it difficult for many lecturers to use digital platforms effectively, which ultimately impacts the quality of the teaching and learning process. However, this condition also provides an opportunity for institutions to introduce technology more widely in the educational process and improve the digital literacy of all parties involved.

Teachers' ability to utilize technology is a key component that influences the quality of online learning. Many lecturers feel unfamiliar with the learning platforms they use, which reduces the quality of their teaching. Likewise, students face the same problem, namely that some students do not have the necessary devices to attend class. However, this situation also provides an opportunity for lecturers and students to improve their digital skills. Educational institutions must provide support in the form of technology training and better access to learning resources to improve online learning outcomes. Overall, the COVID-19 pandemic has driven innovation in teaching methods and accelerated the use of educational technology at IAIN Kerinci, despite the many challenges faced during the transition to online learning. Therefore, it is important for the institution to continue to strengthen the infrastructure and provide the necessary support so that this educational transformation can continue and produce quality learning outcomes in the future.

## REFERENCES

- Ananda, S. P. (2021). Penelitian transformasi pandemi covid-19 diindonesia: perubahan dan tantangan dalam sistem pembelajaran.
- Andini, R., & Prasetya, D. (2021). Pengaruh Pembelajaran Daring terhadap Partisipasi Mahasiswa dalam Pembelajaran. *Jurnal Pendidikan Indonesia*, 10(3), 195-203.
- Aulia, R. (2022). Pengaruh Pelatihan Teknologi terhadap Kesiapan Mahasiswa dalam Pembelajaran Daring. *Jurnal Teknologi Pendidikan Indonesia*, 12(1), 130-140.
- Azzahra, N. F. (2020). *Dampak Covid-19 terhadap pendidikan Indonesia: Kajian tentang pelaksanaan kebijakan belajar dari rumah*. Pusat penelitian pendidikan, kementerian pendidikan dan kebudayaan.
- Darmawan, A. (2021). Tantangan Infrastruktur Listrik dalam Pembelajaran Daring di Daerah Pedesaan. *Jurnal Pendidikan Indonesia*, 10(2), 101-110.
- Dewi, R. (2020). Dampak Pembelajaran Daring terhadap Kesehatan Mental Mahasiswa. *Jurnal Psikologi Pendidikan Indonesia*, 8(2), 150-160.
- Fadhillah, M. (2021). Analisis Evaluasi Pembelajaran Daring di Masa Pandemi. *Jurnal Pendidikan dan Teknologi Indonesia*, 9(2), 130-138.
- Ferdi, A., & Rangga, M. A. (2021). *Pembelajaran online seperti penggunaan Zoom, Google Classroom, Learning management Systems (LMS)*.
- Firmansyah, R. (2021). Tantangan Pembelajaran Daring di Daerah Terpencil. *Jurnal Pendidikan Indonesia*, 15(3), 175-183.
- Fitriani, L. (2022). Penguasaan Teknologi dalam Pembelajaran Daring pada Mahasiswa Perguruan Tinggi. *Jurnal Teknologi Pendidikan*, 9(2), 120-128.
- Harsono, T. (2021). Tantangan Dosen dalam Mengimplementasikan Teknologi Pembelajaran Daring. *Jurnal Pendidikan dan Teknologi*, 9(2), 145-155.
- Hidayat, S. (2020). Kesenjangan Akses Internet dalam Pendidikan Selama Pandemi. *Jurnal Penelitian Pendidikan*, 10(1), 55-62.
- Hidayat, S., & Kurniawan, D. (2020). Tantangan Psikologis dalam Pembelajaran Jarak Jauh. *Jurnal Pendidikan dan Teknologi Indonesia*, 7(3), 215-225.
- Kartika, F., & Nugroho, B. (2020). Beban Ekonomi Mahasiswa dalam Penggunaan Kuota Internet untuk Pembelajaran Daring. *Jurnal Ekonomi dan Pendidikan*, 9(3), 143-152. <https://www.academia.edu/download/84213891/19.pdf>.
- Kurniawan, H. (2022). Keterampilan Digital dan Tantangannya dalam Pembelajaran Jarak Jauh. *Jurnal Teknologi dan Pendidikan*, 8(3), 145-153.
- Lestari, M., & Susanto, A. (2021). Pentingnya Pelatihan Teknologi bagi Dosen dalam Pembelajaran Daring. *Jurnal Pendidikan Nasional*, 10(3), 170-180.
- Lestari, S. (2020). Tantangan Pembelajaran Daring di Rumah: Kondisi Fasilitas Belajar Mahasiswa. *Jurnal Pendidikan Nasional*, 8(4), 190-198.
- Lestari, T. (2022). Tantangan Evaluasi Pembelajaran Daring pada Mahasiswa Perguruan Tinggi. *Jurnal Pendidikan Nasional*, 11(1), 75-84.
- Nugraha, B., & Putri, F. (2021). Pengaruh Pembelajaran Daring terhadap Motivasi Belajar Mahasiswa. *Jurnal Pendidikan Nasional*, 9(4), 180-190.
- Pahril, A., (2020). *Studi Eksploratif Dampak Pandemi COVID-19 terhadap Proses Pembelajaran Online di LAIN Kerinci*. Peningkatan Akses Internet.
- Pratama, A. (2021). Tantangan Penggunaan Platform Digital dalam Pembelajaran Daring. *Jurnal Pendidikan Teknologi*, 8(3), 67-75. <http://almufi.com/index.php/AJP/article/view/74>.
- Pratama, R. (2021). Manajemen Waktu dan Kemandirian Belajar dalam Pembelajaran Daring. *Jurnal Teknologi Pendidikan*, 10(3), 134-142.
- Pratama, R., & Dewi, S. (2021). Motivasi Mahasiswa dalam Pembelajaran Daring di Era Pandemi. *Jurnal Penelitian Pendidikan Indonesia*, 12(4), 240-250.
- Pratama, R. (2022). Kolaborasi Pemerintah dan Institusi dalam Mendukung Infrastruktur Pembelajaran Daring. *Jurnal Pendidikan dan Kebijakan Publik*, 11(1), 115-124.
- Pratiwi, S., & Rizky, D. (2020). Kesiapan Mahasiswa Menghadapi Pembelajaran Daring: Tantangan Literasi Digital. *Jurnal Teknologi Pendidikan*, 11(4), 200-210.
- Rahman, A. (2021). Keefektifan Metode Ceramah dalam Pembelajaran Daring. *Jurnal Pendidikan Islam*,



8(1), 56-63.

- Rahmat, A. (2022). Disiplin dan Tanggung Jawab Mahasiswa dalam Pembelajaran Daring. *Jurnal Pendidikan Digital*, 11(1), 67-75.
- Rahmawati, I., & Kurnia, T. (2021). Kendala Perangkat dalam Pembelajaran Daring pada Mahasiswa. *Jurnal Teknologi Pendidikan Indonesia*, 12(3), 220-230.
- Ramadhan, A. (2021). Keterampilan Teknologi dan Tantangan Pembelajaran Mandiri pada Mahasiswa. *Jurnal Pendidikan Digital*, 8(3), 125-135.
- Rini, M., & Subekti, D. (2022). Biaya Kuota Internet dan Keterlibatan Mahasiswa dalam Pembelajaran Daring. *Jurnal Ekonomi dan Pendidikan*, 11(1), 49-56.
- Samani, M. (2012). *Konsep dan Model Pendidikan Karakter*. Bandung: Remaja Rosdakarya.
- Sari, N., & Putri, A. (2020). Pengaruh Metode Pembelajaran Daring terhadap Keterlibatan Mahasiswa. *Jurnal Teknologi dan Pendidikan*, 10(2), 110-118. <https://journal.iainlangsa.ac.id/index.php/qalasadi/article/view/2127>.
- Setiawan, B. (2021). Pengaruh Keterbatasan Perangkat Teknologi terhadap Pembelajaran Daring. *Jurnal Teknologi dan Pendidikan*, 7(2), 89-97. <https://jurnal.staialhidayahbogor.ac.id/index.php/ei/article/view/1665>.
- Sinta, R. (2021). Pengaruh pada kualitas pembelajaran waktu Covid-19. Minimnya bimbingan langsung.
- Surya, F. (2020). Kendala Pembelajaran Daring di Indonesia: Tinjauan Terhadap Keterbatasan Infrastruktur dan Teknologi. *Jurnal Teknologi dan Pendidikan*, 9(4), 190-198.
- Suryani, A. (2020). Partisipasi Mahasiswa dalam Kelas Daring: Hambatan Perangkat Teknologi. *Jurnal Teknologi dan Pendidikan*, 9(1), 55-65.
- Utami, S., & Wijayanto, R. (2022). Efektivitas Penggunaan Teknologi oleh Dosen dalam Pembelajaran Daring. *Jurnal Teknologi dan Pendidikan*, 9(1), 85-95.
- Wahyuni, T. (2020). Dampak Pembelajaran Daring terhadap Partisipasi Mahasiswa. *Jurnal Pendidikan Indonesia*, 11(2), 80-88.
- Wicaksono, S. (2021). Ketidakmerataan Infrastruktur Internet di Indonesia dan Dampaknya terhadap Pembelajaran Daring. *Jurnal Teknologi dan Pendidikan*, 8(2), 120-130.
- Widodo, H., & Susanti, E. (2021). Program Bantuan Perguruan Tinggi untuk Mendukung Pembelajaran Daring Mahasiswa. *Jurnal Pendidikan Tinggi Indonesia*, 10(3), 180-190.
- Wulandari, T. (2020). Dampak Keterbatasan Perangkat dalam Pembelajaran Daring. *Jurnal Pendidikan dan Teknologi Informasi*, 14(4), 214-222.
- Wulandari, T. (2021). Stres dan Adaptasi Mahasiswa Terhadap Pembelajaran Daring. *Journal Kesehatan Mental Mahasiswa*, 6(2), 99-108.