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University Learning Experience During Pandemic Disruption in Antasari State Islamic University Banjarmasin

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Abstract

The focus of this research reveals about the learning experience at one of the Islamic universities in Indonesia, namely UIN Antasari Banjarmasin. This type of research is qualitative with a phenomenological approach. The collection technique uses interviews, observation and documentation. Interviews were conducted with several lecturers and students to obtain data that can answer the problems of this research. Then we have interview data with in-depth evaluation and interpretation to understand how the learning experience, especially distance learning, and all the problems that arise and solutions are solved. The results showed that the learning experience experienced by students contained challenges and opportunities. The challenge was the sudden closure of face-to-face classes, so there was a lack of preparation in many ways. Meanwhile, the opportunity for academics and students to get used to self-study (an important part of higher education culture) since the lecture was closed, however, distance classes were opened. It is hoped that the results of this study can be useful for many parties, especially in making teaching decisions in universities.

Keywords: *Experience*, *Pandemic*, *Distance Learning*, *Higher Education*.

Pengalaman Belajar Universitas Selama Disrupsi Pandemi di UIN Antasari Banjarmasin

Abstrak

Fokus penelitian ini mengungkapkan tentang pengalaman belajar di salah satu Perguruan tinggi Islam yang ada di Indonesia, yakni UIN Antasari Banjarmasin. Jenis penelitian ini adalah kualitatif dengan pendekatan fenomenologi. Teknik pengumpulan menggunakan wawancara, observasi dan dokumentasi. Wawancara dilakukan kepada beberapa dosen dan mahasiswa untuk mendapatkan data yang dapat menjawab permasalahan penelitian ini. Kemudian kami memiliki data wawancara dengan evaluasi dan interpretasi mendalam untuk memahami bagaimana pengalaman belajar, terutama pembelajaran jarak jauh, dan semua masalah yang muncul dan solusi yang diselesaikan. Hasil penelitian menunjukkan bahwa pengalaman belajar yang dialami oleh mahasiswa terdapat tantangan dan peluang. Tantangannya adalah penutupan kelas tatap muka yang tiba-tiba, sehingga ada kekurangan persiapan dalam banyak hal. Sementara itu, peluang bagi akademisi dan mahasiswa untuk membiasakan diri belajar mandiri (salah satu bagian penting dari budaya perguruan tinggi) sejak perkuliahan ditutup, namun dibuka kelas jarak jauh. Diharapkan hasil penelitian ini dapat bermanfaat bagi banyak pihak khususnya dalam pengambilan keputusan mengajar di perguruan tinggi.

Kata kunci: Pengalaman, Pandemi, Pembelajaran Jarak Jauh, Perguruan Tinggi.

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A. Introduction

The Covid-19 pandemic has hit the agreement of things to come instruction universe through the assistance of advancement. Nonetheless, advancement cannot supplant the undertaking of instructors, speakers, and cooperative advancement among understudies and educators since schools are tied in with acquiring data and worth, investment, and flexibility.¹ This pandemic circumstance makes it hard for every person to exploit development to encourage widespread training and education. Then again, the pandemic is a test in making imagination by using advancement to impart data and guarantee learning is conveyed accurately. Simultaneously, this challenge is additionally an open door on how advancement can assist with rejuvenating understudies and understudies during the 21st 100 years. A critical ability in the 21st century is independent gaining or the independent advancement that outcomes from distant how-to guidance.

Notwithstanding the developments and answers for tough spots, it just so happens that there are invigorating encounters and perspectives to concentrate on the effect of the public reaction to the pandemic.² Simamora,³ comprehends that this pandemic period can plan and ingrain the propensity to become future free understudies through different electronic classes or online courses that understudies take. In like manner, understudies can cooperate to handle issues in

¹ Hari Bhakta Sharma et al., "Challenges, Opportunities, and Innovations for Effective Solid Waste Management during and Post COVID-19 Pandemic," *Resources, Conservation and Recycling* 162 (1 November 2020): 105052, https://doi.org/10.1016/j.resconrec.2020.105052. SUDARMO et al., "The Identification of Online Strategy Learning Results While Students Learn from Home During the Disruption of the COVID-19 Pandemic in Indonesia," *Journal of Contemporary Issues in Business and Government* 27, no. 2 (8 Maret 2021): 1950–56, https://doi.org/10.47750/cibg.2021.27.02.205. Sardjana Orba Manullang, Mardani Mardani, dan Aslan Aslan, "The Effectiveness of Al-Quran Memorization Methods for Millennials Santri During Covid-19 in Indonesia," *Nazhruna: Jurnal Pendidikan Islam* 4, no. 2 (2021): 195–207. Aslan Aslan et al., "TEACHER'S LEADERSHIP TEACHING STRATEGY SUPPORTING STUDENT LEARNING DURING THE COVID-19 DISRUPTION," *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam* 5, no. 3 (21 November 2020): 321–33, https://doi.org/10.31538/ndh.v5i3.984. Purniadi Putra et al., "The Students Learning from Home Experiences during Covid-19 School Closures Policy In Indonesia," *Jurnal Iqra': Kajian Ilmu Pendidikan* 5, no. 2 (5 September 2020): 30–42, https://doi.org/10.25217/ji.v5i2.1019.

² El Said dan Ghada Refaat, "How Did the COVID-19 Pandemic Affect Higher Education Learning Experience? An Empirical Investigation of Learners' Academic Performance at a University in a Developing Country," *Advances in Human-Computer Interaction* 2021 (10 Februari 2021): e6649524, https://doi.org/10.1155/2021/6649524.

³ Roy Martin Simamora, "The Challenges of Online Learning during the COVID-19 Pandemic: An Essay Analysis of Performing Arts Education Students | Studies in Learning and Teaching," 7 September 2020, https://scie-journal.com/index.php/SiLeT/article/view/38.

learning and manage genuine issues. He added that it was trying for the two understudies and educators to convey preparation where instructors expected to guarantee that understudies figured out the learning material. Web learning is very hard for the showing scene in the present status of Indonesia, which has numerous islands.⁴ How advancement can be used, how to give web access in distant regions where electronic items without web access are as yet an extravagance. This is hard for all circles, and these days, we should cooperate to enhance to answer significant issues that happen to students and other groups.

The condition of the Covid-19 pandemic with all its impacts on lecture activities worldwide has also made policymakers in the training area have the option to adjust themselves in completing the educational experience. This change is recognized through innovative educational implementation strategies, where students can get wider opportunities to develop new abilities through several learning exercises outside their study program. Rapanta et al.,⁵ carried out projects during the pandemic, such as Covid-19 control volunteers, Thematic Community Service Program, Learning from Home, and Permata Sakti. Many students throughout Indonesia attended the whole program. Then again, Ng & Chu,⁶ and Prahmana et al,⁷ also said this pandemic period allowed Indonesia to escape the pandemic and become a green country.

Web-based learning frameworks like those we observed at the State Islamic University of Antasari in Banjarmasin answer the persistent suspension of face-toface addresses.⁸ Web-based learning at the university can be interpreted as opportunities and barriers to growth in a coordinated or offbeat climate utilizing

⁴ Qinlai Liu et al., "Medical Morphology Training Using the Xuexi Tong Platform During the COVID-19 Pandemic: Development and Validation of a Web-Based Teaching Approach," *JMIR Medical Informatics* 9, no. 3 (15 Maret 2021): e24497, https://doi.org/10.2196/24497.

⁵ Chrysi Rapanta et al., "Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity," *Postdigital Science and Education* 2, no. 3 (1 Oktober 2020): 923–45, https://doi.org/10.1007/s42438-020-00155-y.

⁶ Davy Tsz Kit Ng dan Samuel Kai Wah Chu, "Motivating Students to Learn AI through Social Networking Sites: A Case Study in Hong Kong," *Online Learning* 25, no. 1 (Maret 2021): 195–208.

⁷ Rully Charitas Indra Prahmana et al., "Community Radio-Based Blended Learning Model: A Promising Learning Model in Remote Area during Pandemic Era," *Heliyon* 7, no. 7 (1 Juli 2021): e07511, https://doi.org/10.1016/j.heliyon.2021.e07511.

⁸ Quang-Dung Pham et al., "Detachable Web-Based Learning Framework to Overcome Immature ICT Infrastructure Toward Smart Education," *IEEE Access* 9 (2021): 34951–61, https://doi.org/10.1109/ACCESS.2021.3062371.

various technological gadgets (e.g., mobile phones, PCs, etc.) to achieve learning objectives at the university level with web access. In this climate, students can be anywhere to study and communicate with educators and other students. Internet learning has become the preferred learning answer for teachers, students, and researchers during this pandemic, leaving many questions and obstacles that need solutions. However, careful planning, especially the status in the use of supporting gadgets, is very much needed in carrying out the realization of the internet so that address training can run successfully at Antasari University. Web-based distance learning provides the ability to adapt to the implementation of conversations to be widely used so that disrupted educational solutions can be minimized.⁹

Implementing web-based learning in universities and schools is seen as ready to expand innovation in learning and increase student learning independence.¹⁰ However, Internet learning in further education positively has its difficulties. One of the obstacles that students see when going through web-based addresses is the temperamental of the web organization, especially for people who live in remote areas. In addition, not all students have gadgets that help web-based learning, such as workstations, satisfying cellphones, and Wi-Fi networks at home.¹¹ Students in Banjarmasin face a comparative exam, especially for students who live in areas where the internet network is still minimal. Some students also have problems using applications that help with online conversations. Not only students but several lecturers and teaching staff also experienced similar problems. So, from this picture, analysts need to describe the understanding, preparation, and difficulties that students and teachers see during web addresses

⁹ Geoffrey M. Curran et al., "Effectiveness-implementation Hybrid Designs," *Medical care* 50, no. 3 (Maret 2012): 217–26, https://doi.org/10.1097/MLR.0b013e3182408812.

¹⁰ Xiujun Zhang, "Thoughts on large-scale long-distance web-based teaching in colleges and universities under novel coronavirus pneumonia epidemic: a case of Chengdu University," dalam *4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020)*, vol. 416 (Atlantis Press, 2020), 1222–25. Gunawan Widjaja dan Aslan Aslan, "Blended Learning Method in The View of Learning and Teaching Strategy in Geography Study Programs in Higher Education," *Nazhruna: Jurnal Pendidikan Islam* 5, no. 1 (2 Februari 2022): 22– 36, https://doi.org/10.31538/nzh.v5i1.1852.

¹¹ Maila Dinia Husni Rahiem, "Indonesian University Students' Likes and Dislikes about Emergency Remote Learning during the COVID-19 Pandemic / Maila Dinia Husni Rahiem," *Asian Journal of University Education (AJUE)* 17, no. 1 (Januari 2021): 1–18. Prasetyono Hendriarto et al., "The Relevance of Inquiry-Based Learning in Basic Reading Skills Exercises for Improving Student Learning Outcomes in Madrasah Ibtidaiyah," *At-Tajdid : Jurnal Pendidikan Dan Pemikiran Islam* 5, no. 01 (15 Juni 2021): 28–41, https://doi.org/10.24127/att.v5i01.1473.

during this pandemic. Analysts also need to investigate the good perspectives felt by students and teachers during web addresses in higher education practice, especially at Antasari State Islamic University.¹²

As of now, as per the improvement of the COVID-19 crisis circumstance, a few nations have embraced differently adaptable instructing and learning approaches in their schooling systems, and online training is one of the primary methodologies. As a feature of distance schooling, Internet learning consistently emphasizes giving admittance to instructive encounters more adaptable than grounds-based training by using different kinds of innovation.¹³ This implies that web-based learning is more flexible than getting its hang during the ongoing pandemic. They make sense of the adaptable instructional method as a student-focused instructive system, which gives a decision on the principal aspects of the study, like learning general setting, assets for educating and learning, educational methodologies, learning exercises, support for instructors, and understudies.

The Covid-19 pandemic has hit the agreement of things to come instruction universe through the assistance of advancement. Nonetheless, advancement cannot supplant the undertaking of instructors, speakers, and cooperative advancement among understudies and educators since schools are tied in with acquiring data and worth, investment, and flexibility.¹⁴ This pandemic circumstance makes it hard for every person to exploit development to encourage widespread training and education. Then again, the pandemic is a test in making imagination by using advancement to impart data and guarantee learning is conveyed accurately. Simultaneously, this challenge is additionally an open door on how advancement can assist with rejuvenating understudies and understudies during the 21st 100 years. A critical ability in the 21st century is independent

¹² Emilda Sulasmi dan Agussani, "Managing Virtual Learning at Higher Education Institutions during Pandemic Covid-19 in the Indonesian Context," *Educational Sciences: Theory & Practice* 21, no. 1 (12 Maret 2021): 98–111, https://doi.org/10.12738/jestp.2021.1.008.

¹³ Chaolin Huang et al., "Clinical Features of Patients Infected with 2019 Novel Coronavirus in Wuhan, China," *The Lancet* 395, no. 10223 (15 Februari 2020): 497–506, https://doi.org/10.1016/S0140-6736(20)30183-5.

¹⁴ Sharma et al., "Challenges, Opportunities, and Innovations for Effective Solid Waste Management during and Post COVID-19 Pandemic."

gaining or the independent advancement that outcomes from distant how-to guidance.

This way, educating and learning can be more versatile. Generally speaking, online learning is described as a chance to fill in a planned or awkward environment utilizing different devices with web access. In this environment, understudies can be anyplace, autonomous to learn and connect with teachers and different understudies. Concurrent learning is a more coordinated learning procedure, where classes are requested with impeccable timing and in a live virtual homeroom setting. Accordingly, understudies benefit from the persistent joint effort of getting texts and information when required.¹⁵ In the meantime, understudies in strange learning cannot get input on minutes and messages. Similarly, learning content is not open in roundabout study halls, be that as it may, system or chief gathering. A few phases of the learning board system that are much of the time utilized in Indonesia incorporate Google Classroom, Edmodo, and Moodle.¹⁶ Working on the Effectiveness of Online Learning One of the keys to guaranteeing practical internet-based training is dynamic learning. Dynamic learning incorporates various modes, techniques, and related learning developments. They recognized six components of successful internet-based instruction in a crisis.¹⁷ The six aspects include Guaranteeing the accessibility of a dependable organization foundation. A solid organization framework is vital for helping different exercises, for example, simultaneous showing utilizing video conferencing, offbeat advancing by getting to or downloading materials carefully, and cooperation with peers through friendly stages. They are using simple toutilize learning apparatuses. Utilizing agreeable learning devices is valuable for understudies finding and handling data, building information, teaming up with

¹⁵ Kevin M. King et al., "Longitudinal Modeling in Developmental Neuroimaging Research: Common Challenges, and Solutions from Developmental Psychology," *Developmental Cognitive Neuroscience*, Methodological Challenges in Developmental Neuroimaging: Contemporary Approaches and Solutions, 33 (1 Oktober 2018): 54–72, https://doi.org/10.1016/j.dcn.2017.11.009.

¹⁶ Nur Alim et al., "The effectiveness of Google classroom as an instructional media: A case of state islamic institute of Kendari, Indonesia," *Humanities & Social Sciences Reviews* 7, no. 2 (2019): 240–46.

¹⁷ Mohammad Ziaul Hoq, "E-Learning during the period of pandemic (COVID-19) in the kingdom of Saudi Arabia: an empirical study," *American Journal of Educational Research* 8, no. 7 (2020): 457–64.

peers, communicating understanding, and assessing the impacts of learning. Educators must avoid troubling understudies and guardians by requesting that they utilize an excessive number of applications or stages.¹⁸

In this unique circumstance, schools should organize to utilize predictable learning instruments or stages among all teachers.¹⁹ Take on proper computerized learning assets Teachers are expected to have the option to give fitting intellectual advanced learning assets, for example, online video miniature talks, digital books, reproductions, liveliness, tests, and games. The determination of computerized learning assets should likewise incorporate a few measures, expressly permitting precision, intelligence, simplicity of variation, social pertinence, responsiveness, and satisfying reasonableness, trouble, construction, media, and association. Work with powerful web-based educating and learning. Unlike conventional homeroom learning, online guidance is described by having a different instructor and understudy areas. Flexible learning should consider compelling internet education and informative picking up utilizing various advances. Instructors can utilize powerful techniques for getting sorted out guidance by embracing an assortment of showing procedures, for example, contextual analyses, open discussion and conversation, and experiential learning. Offer help and administration for educators and understudies. Effective help administrations are critical to guaranteeing quality internet-based training.²⁰

Online training support administrations incorporate two sorts: support administrations for internet instruction for educators and backing administrations for web-based learning for understudies. The two administrations can be furnished as a team with the public authority, schools, organizations, families,

¹⁸ Junjie Pang et al., "Collaborative city digital twin for the COVID-19 pandemic: A federated learning solution," *Tsinghua Science and Technology* 26, no. 5 (Oktober 2021): 759–71, https://doi.org/10.26599/TST.2021.9010026.

¹⁹ Ati Suci Dian Martha et al., "Assessing Undergraduate Students' e-Learning Competencies: A Case Study of Higher Education Context in Indonesia," *Education Sciences* 11, no. 4 (April 2021): 189, https://doi.org/10.3390/educsci11040189.

²⁰ Ryotaro Hayashi, Marito Garcia, dan Angelica Maddawin, Online Learning in Sri Lanka's Higher Education Institutions during the COVID-19 Pandemic (Asian Development Bank, 2020), https://www.adb.org/publications/online-learning-sri-lanka-during-covid-19. Sudarmo Sudarmo et al., "The Future of Instruction Media in Indonesian Education: Systematic Review," AL-ISHLAH: Jurnal Pendidikan 13, no. 2 (31 Agustus 2021): 1302–11, https://doi.org/10.35445/alishlah.v13i2.542.

networks, and other related parties.²¹ An engaging joint effort between state-run administrations, ventures, and instructive establishments, even with the requirement for online training during the pandemic and its future turn of events, the public authority should assume different parts in strategy direction, general coordination, and effective management. The public authority should likewise arrange with organizations, schools, grounds, research foundations, families, networks, and different gatherings to assemble a smooth correspondence stage, pick fitting learning assets, give advantageous learning apparatuses, and empower various learning techniques and backing instructing strategies. Adaptable. Compelling help administrations for online training can be acknowledged through close participation from different gatherings.²²

B. Research Methods

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In this method section, the author will explain the stages of this study to explore online learning experiences in universities during this royal pandemic disorder.²³ The sample learning community has various views, experiences, and perspectives on learning during the response to the pandemic, not only in Indonesia but also in other international communities. So, to answer the study's problem, we have conducted a series of interviews with several academics and students at the State Islamic University of Antasari by asking questions to gather and collect their learning experiences disrupted by the pandemic. After the data is collected, then we continue to analyze the data. As for how we analyze interview

²¹ Abdelsalam M. Maatuk et al., "The COVID-19 Pandemic and E-Learning: Challenges and Opportunities from the Perspective of Students and Instructors," *Journal of Computing in Higher Education* 34, no. 1 (1 April 2022): 21–38, https://doi.org/10.1007/s12528-021-09274-2.

²² Sanaa Ashour, Ghaleb A. El-Refae, dan Eman A. Zaitoun, "Post-Pandemic Higher Education: Perspectives from University Leaders and Educational Experts in the United Arab Emirates," *Higher Education for the Future* 8, no. 2 (1 Juli 2021): 219–38, https://doi.org/10.1177/23476311211007261.

²³ Mohammad Mahdi Bordbar, Javad Tashkhourian, dan Bahram Hemmateenejad, "Qualitative and Quantitative Analysis of Toxic Materials in Adulterated Fruit Pickle Samples by a Colorimetric Sensor Array," *Sensors and Actuators B: Chemical* 257 (1 Maret 2018): 783–91, https://doi.org/10.1016/j.snb.2017.11.010.

data, we follow several steps suggested by experts, especially in qualitative analysis of interview data.²⁴

The means we have done are the principal. We attempt to figure out the record completely. Then, we led Tati's child to the original meeting copy. Then, we attempted to conceptualize the meeting information by adhering to the information sections and examining the fragments that we had coded and deciphered a bit, considering that the first information we got was still in a crude state before we composed the outcomes.²⁵ After we finish up the discoveries by sticking to the standards of legitimacy and dependability, we report as an expressive subjective report audit. Moreover, this compensation relies totally upon semi-primary inquiry interview information and perceptions and other writing survey audits that help the method involved with doing this work. This is the course of information assortment moves forward to the last report of the contractive review.²⁶

C. Results and Discussion

1. Learning challenges during the pandemic

The problems that have been mentioned in this study can be divided into two, arising from themselves and the lecturers who teach. It is suspected that the problem arises because students cannot learn enough or adapt to the learning process, and the way of teaching and interaction among academics; lecturers, researchers and more students is less interactive. The following is the result of identifying data about challenging experiences for academics and students at the State Islamic University of Antasari Banjarmasin. These problems are divided into three aspects related to information system problems. The following are excerpts of semi-structured interviews with resource persons (lecturers).

²⁴ Kristie Hadden, "The Stoplight Method: A Qualitative Approach for Health Literacy Research," *HLRP: Health Literacy Research and Practice* 1, no. 2 (April 2017): e18–22, https://doi.org/10.3928/24748307-20170328-02.

²⁵ J. Omona, "Sampling in Qualitative Research: Improving the Quality of Research Outcomes in Higher Education," *Makerere Journal of Higher Education* 4, no. 2 (3 Juli 2013): 169–85, https://doi.org/10.4314/majohe.v4i2.4.

²⁶ Zhang, "Thoughts on large-scale long-distance web-based teaching in colleges and universities under novel coronavirus pneumonia epidemic."

The first question # Can you explain what experiences were very challenging during the learning period during the pandemic disturbance at UIN Antarasari?

...I can describe Information and Communication Technology problems, including Information Technology Infrastructure related to the laptop/computer facilities used, such as the lack of specifications, then unstable connection problems resulting in disrupted online learning and limited internet access. In addition, access to the online learning process requires supporting media, such as LMS (Learning Management System) or video conferencing platforms, to support the continuity of the learning process. However, at the beginning of its implementation, it still encountered several obstacles, such as the LMS, which often experienced server downs so that students found it difficult and experienced delays in taking attendance and collecting assignments... (participant #1).

Based on the answers from the first participant that the problem that becomes a challenge is the issue of information and communication technology because the infrastructure factor is not adequate, such as the availability of laptops and computers; this is a challenge in itself as well as problems or challenges in access for students who need media support such as learning management systems. Nevertheless, at the end of the pandemic, these problems can be overcome one by one so that the problems that were a challenge in the early days of the pandemic become an efficient solution after the pandemic and this is in line with the demands of learning in a tall tree where academics are expected to be able and independent following the principle of independence.

When it comes to organizing, the learning culture during this pandemic is a transition from offline to online, which experiences many obstacles. Then we asked the second question# What were the experiences and obstacles in organizing or adapting learning during the pandemic at UIN Antasari?

...We (lectures and researchers) did experience some changes related to government decisions and policies in responding to the Covid-19 pandemic issue, such as the learning process, which has completely changed from face-to-face to online, and several policies have changed so that some students reveal that it is still difficult to adapt. Because online learning also requires students to study independently, the absence of direct learning control makes it difficult for them so that learning motivation is reduced. The presence of lecturers is undoubtedly an essential thing for the learning process, but often the lecturers are not present in the learning process, making it increasingly difficult for students to understand the material given (participant #2). From the answers above, it can be understood that academics, both lecturers and other staff and confident students, need adaptation and adjustment related to the learning culture due to the policy of closing lectures but opening classes from home. This happens when study habits depend highly on lecturers and staff officers, such as learning coordinators. However, during the pandemic, students are fully expected to become more independent, considering that the system at UIN Antasari has not been able to provide certainty of targeted control. This is an obstacle to adapting the learning culture from the Face to Face lecture method to distance learning.

Next, we asked the third question # How are the interactions between lecturers and students and fellow lecturers and students with students?

... The interaction problem referred to above is the lack of lecturers' presence in the learning process, of course affecting the interaction between lecturers and students, such as the lack of giving job sheet instructions without being explained the previous material, making students find it challenging to work on the given job sheets. So that students' typing is not explicit about the instructions and understanding of the material, so students often do not get the opportunity to either ask their lecturers or ask their friends, but they experience the same thing, namely, they experience the same thing on average... (participation #3).

The issue of distance learning interactions during the pandemic response is a problem that urgently needs a solution. Teaching process Giving material only through screen sharing and only reading the material that has been listed in the curriculum without providing a detailed explanation is also one of the obstacles that ultimately, they do not understand the material given. This is the issue of interaction between academics and students.

Then the issue of distance learning materials and systems, so we asked ten students questions about it. Here is the question. How is the distance learning system during the pandemic?

... The online learning process that he is currently undergoing has become less effective due to the uncertainty of how to learn, the learning process that takes too long in front of a laptop/computer, causing boredom, too many assignments, and insufficient collection time. We usually have difficulty adjusting the teaching method, but after a few weeks and getting an explanation of the Google method, we can adapt it ourselves... (participant#4). Particular problems with offline and online learning transition features are also accompanied by changes in student behavior, such as changes in attitude where some students were initially disciplined to become lazy to follow the learning process and even cheated when doing quizzes, lack of self-confidence is also the cause of students' difficulty adapting to the online learning process.

The following is the fifth question about the problem of individual interaction during learning during the pandemic. How do individuals change when they are on the online learning path?

... Learning interactions during the pandemic are a severe issue because the reciprocal relationship between teachers (educators) and students (students) has not been as smooth as the everyday face-to-face learning interactions before the pandemic. In a distance teaching system, relationships and interactions should be as productive as possible so that students and lecturers are constrained by communication and academic behavior (participation#5).

Based on the interview responses above, we can understand that academic interaction at UIN Antasari does not occur productively, either between students and students or between lecturers and students. This, of course, has affected the learning outcomes and the improvement of the scientific character of each student and other academics. Such as the difficulty of discussing because of limited time and access to the discussion. Then the lack of understanding of the material is also an obstacle for them.

D. Discussion

After reviewing the results of interviews with academics and students about the long-distance learning experience for the sake of this brother, the author can conclude that learning during the Covid-19 pandemic has made the education system change different from learning in the distance learning period.²⁷ This is none other than because of distance learning that utilizes technology and supporting infrastructure and the impact of adaptation that they must spend well. Of the five interviewees we interviewed, they revealed that learning during the pandemic by utilizing technology to make learning take place has left the cleaning process at Antasari University somewhat constrained in terms of communication,

 $^{^{27}}$ Said dan Refaat, "How Did the COVID-19 Pandemic Affect Higher Education Learning Experience?"

interaction, and personal changes and how the learning mechanism has all shifted.²⁸

As felt in many other universities, what happened at Antasari State Islamic University Banjarmasin is that the pandemic has made it difficult for all academic activities, so they must be able to adopt and get used to new ways of learning and working, which so far may not be entirely remote. This is a challenge in itself and must be changed independently. One of the essential things for the academic community at Antasari University Banjarmasin is that the educational or university continues to invite the academic community to remain committed and have high enthusiasm for learning that supports academic life even though it is constrained.²⁹

So we researchers, after getting an understanding of how lecturers and students felt the impact of covid-19, which was so heavy, finally all understood that the effects of the pandemic were not only on health and the economy but on other lives, especially on educational activities which were previously carried out faceto-face but after the pandemic hit. Education all activities are carried out remotely. So, this covid-19 has caused difficulties and opportunities for all academics, perhaps, especially for students who have not been used to interacting remotely facilitated by technological means. Moreover, in Indonesia, the average university is still experiencing problems procuring specialized tools that allow learning under challenging times flexibly and automatically. For example, the author himself is increasingly having to adapt to the conditions of learning and research activities remotely. We have transferred all of this to the management of online learning. It is proven that when the university does not encounter many obstacles in distance learning, we conclude that UIN Antasari is true; before The passing of covid-19 has, become accustomed to giving students assignments and opportunities to study independently, especially those postgraduates. So we can reiterate that the first challenge is indeed the mastery of technology, both by the university and students,

²⁸ Sharma et al., "Challenges, Opportunities, and Innovations for Effective Solid Waste Management during and Post COVID-19 Pandemic."

²⁹ R. S. Putri et al., "Impact of the COVID-19 Pandemic on Online Home Learning: An Explorative Study of Primary Schools in Indonesia," *International Journal of Advanced Science and Technology*, 2020, 4809–18.

who may have some problems with their learning management system using this technology. This is not only experienced by academics at the Antasari state Islamic university but also at universities in other parts of the world.³⁰

The next obstacle, as described in the section above, is that lecturers and faculty members, such as researchers, feel that several things have changed related to government policies, namely closing lectures but opening up remotely. The problem occurs when academics such as lecturers have to adapt themselves to learning. What is unique about this is that not all academics, even though they are lecturers, are accustomed to and able to adopt online learning. According to the studies conducted,³¹ this is also felt at other universities in Indonesia.

So the difficulty at the end of this, we can say that the problem of interaction between individuals such as students and students, lecturers with campus leadership lecturers and campus leaders indeed changes where distance learning is a new thing, so all individuals must continue to actively learn to adapt to ways of learning that are directed by the university leadership and also according to the recommendations of experts where the pandemic has brought many changes, including changes in the interaction between individuals in academic activities. This is happening in many other academic contacts in Indonesia and abroad.³²

However, after a series of adaptations by sharing information and also enlightenment from the parties, especially finally the parties were able to solve the problem, and it was a different experience that made distance learning and requires adaptation of socialization and improvisation the most crucial thing is the empowerment of maximizers to maximize existing solutions such as internet connections and other infrastructure.³³ This is following the government's

³⁰ Lokanath Mishra, Tushar Gupta, dan Abha Shree, "Online Teaching-Learning in Higher Education during Lockdown Period of COVID-19 Pandemic," *International Journal of Educational Research Open* 1 (1 Januari 2020): 100012, https://doi.org/10.1016/j.ijedro.2020.100012.

³¹ Muhammad Irfan et al., "CHALLENGES DURING THE PANDEMIC: USE OF E-LEARNING IN MATHEMATICS LEARNING IN HIGHER EDUCATION," *Infinity Journal* 9, no. 2 (6 September 2020): 147–58, https://doi.org/10.22460/infinity.v9i2.p147-158.

³² Ana Ivenicki, "Digital Lifelong Learning and Higher Education: Multicultural Strengths and Challenges in Pandemic Times," *Ensaio: Avaliação e Políticas Públicas Em Educação* 29 (9 April 2021): 360–77, https://doi.org/10.1590/S0104-403620210002903043.

³³ Georgia Dewart et al., "Nursing education in a pandemic: Academic challenges in response to COVID-19," *Nurse Education Today* 92 (September 2020): 104471, https://doi.org/10.1016/j.nedt.2020.104471.

direction in which Na to overcome the problems and obstacles experienced by academics in higher education not only at UIN Antasari but parties outside the intensity such as schools and also in Islamic boarding schools also experience similar obstacles where they are constrained by dealing with issues related to distance learning. This makes much sense because the direction and training, and dissemination of breakthroughs in the use of digital technology in a simple way to overcome barriers to distance learning are still very minimal, so the use of various applications requires adaptation and adjustment so that academics, especially new students, need sharing sessions so that they better understand and able to apply to understand what their universities want.³⁴

To be able to handle this during the pandemic, it is hoped that academics have the initiative, not necessarily from the university but from individuals; by having the initiative and a more proactive approach, this will help distance learning remember without observing and imitating and innovating this distance learning approach will harm students themselves.³⁵ Talking about responsibility, indeed, the university has a whole purpose, but when this fails to be implemented, it will also impact the results to be achieved in student learning. For that, he must review how to interact with the handling of existing problems by inviting experts and specialists who can provide solutions for how academics interact to solve problems in remote payment zones.³⁶

This solution, of course, requires learning mapping by bringing experts to guide students and other academics so that teaching can be far away.³⁷ With the mapping and solutions provided, distance learning with the internet can be implemented so that obstacles and tests are no longer a problem because each

³⁴ Erin Gomez, Javad Azadi, dan Donna Magid, "Innovation Born in Isolation: Rapid Transformation of an In-Person Medical Student Radiology Elective to a Remote Learning Experience During the COVID-19 Pandemic," *Academic Radiology* 27, no. 9 (1 September 2020): 1285–90, https://doi.org/10.1016/j.acra.2020.06.001.

³⁵ Wahab Ali, "Online and Remote Learning in Higher Education Institutes: A Necessity in Light of COVID-19 Pandemic," *Higher Education Studies* 10, no. 3 (2020): 16–25.

³⁶ Michael A. Peters et al., "China's Internationalized Higher Education During Covid-19: Collective Student Autoethnography," *Postdigital Science and Education* 2, no. 3 (1 Oktober 2020): 968–88, https://doi.org/10.1007/s42438-020-00128-1.

³⁷ Huang et al., "Clinical Features of Patients Infected with 2019 Novel Coronavirus in Wuhan, China."

individual is required to innovate using existing technology by applying various approaches.³⁸ It is admitted that even though learning at UIN Antasari is expected to have students mentally learning, due to the implementation of distance learning very spontaneously, finally academics do not have the right time to guide, direct and attract students to be able to learn distance learning with good interactive and achieve learning and the goal that must be achieved, students must first understand and be able to apply various technologies so that the learning experience during the pandemic does not only tell the story of difficulties but also gets input and innovations that become alternatives in carrying out distance learning that universities and other education sectors can apply.³⁹

E. Conclusion

Based on the analysis of interview data with several academics and students at the State Islamic University of Antasari Banjarmasin, we can conclude that the problem, namely experiences and learning during the pandemic, has been answered by us with various evidence from scientific studies as well as acknowledgments from several academics and students. So, with this, we would like to conclude that the government's policy of sending students home and activating online or remote classes has left many problems and challenges for lecturers and students in implementing learning policies at home. This problem is partly because this policy is sudden, so not all academics and students can automatically implement the policy. However, what happened in the field was found or acknowledged by students and doctors themselves; they experienced difficulties, namely the transition period or adaptation from Islamic-based classroom learning to distance learning by using assistive devices in technology and other communication devices.

Related to media devices and tools that will assist the distance learning process, it is known that there are many obstacles, including that not all academics

³⁸ Margarida Rodrigues, Mário Franco, dan Rui Silva, "COVID-19 and Disruption in Management and Education Academics: Bibliometric Mapping and Analysis," *Sustainability* 12, no. 18 (Januari 2020): 7362, https://doi.org/10.3390/su12187362.

³⁹ J. Crawford et al., "COVID-19: 20 Countries' Higher Education Intra-Period Digital Pedagogy Responses," *Journal of Applied Learning & Teaching* 3, no. 1 (2020): 1–20, https://doi.org/10.37074/jalt.2020.3.1.7.

are able and flexible to use technology infrastructure to support the distance learning process. In other words, adaptation and transfer of technology and information and learning experiences are needed to take place for Mahesa and other lecturers and researchers at the Antasari state Islamic university. When compared to the problems experienced in the form of obstacles and other problems at the beginning of the implementation of distance-based learning, at the end of this payment, we noted, based on the acknowledgment through interviews, that at the end of learning they were more adaptable and had quite an exciting experience where from the beginning they were not ready but eventually they will be better prepared.

This story tells that it turns out that the pandemic with all its consequences not only brings problems to the world of education and other businesses but also provides benefits and unexpected results where academics are forced to adapt themselves with systems and new applications, so now academics at the State Islamic University Antasari looks like they have started to apply independent learning. This is what is meant by based learning, and this is helped by the presence of a pandemic with all the consequences and solutions. Of course, there are many shortages of funds that require improvement. Therefore, we hope for input and feedback that can help us improve future projects.

References

- Ali, Wahab. "Online and Remote Learning in Higher Education Institutes: A Necessity in Light of COVID-19 Pandemic." *Higher Education Studies* 10, no. 3 (2020): 16–25.
- Alim, Nur, Wa Linda, Fahmi Gunawan, dan Mohd Shamsuri Md Saad. "The effectiveness of Google classroom as an instructional media: A case of state islamic institute of Kendari, Indonesia." *Humanities & Social Sciences Reviews* 7, no. 2 (2019): 240–46.
- Ashour, Sanaa, Ghaleb A. El-Refae, dan Eman A. Zaitoun. "Post-Pandemic Higher Education: Perspectives from University Leaders and Educational Experts in the United Arab Emirates." *Higher Education for the Future* 8, no. 2 (1 Juli 2021): 219–38. https://doi.org/10.1177/23476311211007261.
- Aslan, Aslan, Silvia Silvia, Budi Sulistiyo Nugroho, M. Ramli, dan Rusiadi Rusiadi. "Teacher's Leadership Teaching Strategy Supporting Student Learning During The Covid-19 Disruption." *Nidhomul Haq: Jurnal Manajemen*

Pendidikan Islam 5, no. 3 (21 November 2020): 321–33. https://doi.org/10.31538/ndh.v5i3.984.

- Bordbar, Mohammad Mahdi, Javad Tashkhourian, dan Bahram Hemmateenejad. "Qualitative and Quantitative Analysis of Toxic Materials in Adulterated Fruit Pickle Samples by a Colorimetric Sensor Array." *Sensors and Actuators B: Chemical* 257 (1 Maret 2018): 783–91. https://doi.org/10.1016/j.snb.2017.11.010.
- Crawford, J., K. Butler-Henderson, J. Rudolph, B. Malkawi, M. Glowatz, R. Burton, P. Magni, dan S. Lam. "COVID-19: 20 Countries' Higher Education Intra-Period Digital Pedagogy Responses." *Journal of Applied Learning & Teaching* 3, no. 1 (2020): 1–20. https://doi.org/10.37074/jalt.2020.3.1.7.
- Curran, Geoffrey M., Mark Bauer, Brian Mittman, Jeffrey M. Pyne, dan Cheryl Stetler. "Effectiveness-implementation Hybrid Designs." *Medical care* 50, no. 3 (Maret 2012): 217–26. https://doi.org/10.1097/MLR.0b013e3182408812.
- Dewart, Georgia, Lynn Corcoran, Lorraine Thirsk, dan Kristin Petrovic. "Nursing education in a pandemic: Academic challenges in response to COVID-19." *Nurse Education Today* 92 (September 2020): 104471. https://doi.org/10.1016/j.nedt.2020.104471.
- Gomez, Erin, Javad Azadi, dan Donna Magid. "Innovation Born in Isolation: Rapid Transformation of an In-Person Medical Student Radiology Elective to a Remote Learning Experience During the COVID-19 Pandemic." *Academic Radiology* 27, no. 9 (1 September 2020): 1285–90. https://doi.org/10.1016/j.acra.2020.06.001.
- Hadden, Kristie. "The Stoplight Method: A Qualitative Approach for Health Literacy Research." *HLRP: Health Literacy Research and Practice* 1, no. 2 (April 2017): e18–22. https://doi.org/10.3928/24748307-20170328-02.
- Hayashi, Ryotaro, Marito Garcia, dan Angelica Maddawin. *Online Learning in Sri Lanka's Higher Education Institutions during the COVID-19 Pandemic*. Asian Development Bank, 2020. https://www.adb.org/publications/onlinelearning-sri-lanka-during-covid-19.
- Hendriarto, Prasetyono, Aslan Aslan, Mardhiah, Rahmat Sholihin, dan Wahyudin. "The Relevance of Inquiry-Based Learning in Basic Reading Skills Exercises for Improving Student Learning Outcomes in Madrasah Ibtidaiyah." *At-Tajdid : Jurnal Pendidikan Dan Pemikiran Islam* 5, no. 01 (15 Juni 2021): 28– 41. https://doi.org/10.24127/att.v5i01.1473.
- Hoq, Mohammad Ziaul. "E-Learning during the period of pandemic (COVID-19) in the kingdom of Saudi Arabia: an empirical study." *American Journal of Educational Research* 8, no. 7 (2020): 457–64.
- Huang, Chaolin, Yeming Wang, Xingwang Li, Lili Ren, Jianping Zhao, Yi Hu, Li Zhang, dkk. "Clinical Features of Patients Infected with 2019 Novel Coronavirus in Wuhan, China." *The Lancet* 395, no. 10223 (15 Februari 2020): 497–506. https://doi.org/10.1016/S0140-6736(20)30183-5.
- Husni Rahiem, Maila Dinia. "Indonesian University Students' Likes and Dislikes about Emergency Remote Learning during the COVID-19 Pandemic / Maila Dinia Husni Rahiem." *Asian Journal of University Education (AJUE)* 17, no. 1 (Januari 2021): 1–18.

- Irfan, Muhammad, Betty Kusumaningrum, Yuyun Yulia, dan Sri Adi Widodo. "Challenges During The Pandemic: Use Of E-Learning In Mathematics Learning In Higher Education." *Infinity Journal* 9, no. 2 (6 September 2020): 147–58. https://doi.org/10.22460/infinity.v9i2.p147-158.
- Ivenicki, Ana. "Digital Lifelong Learning and Higher Education: Multicultural Strengths and Challenges in Pandemic Times." *Ensaio: Avaliação e Políticas Públicas Em Educação* 29 (9 April 2021): 360–77. https://doi.org/10.1590/S0104-403620210002903043.
- King, Kevin M., Andrew K. Littlefield, Connor J. McCabe, Kathryn L. Mills, John Flournoy, dan Laurie Chassin. "Longitudinal Modeling in Developmental Neuroimaging Research: Common Challenges, and Solutions from Developmental Psychology." Developmental Cognitive Neuroscience, Methodological Challenges in Developmental Neuroimaging: Contemporary Approaches Solutions, (1 Oktober and 33 2018): 54-72. https://doi.org/10.1016/j.dcn.2017.11.009.
- Liu, Qinlai, Wenping Sun, Changqing Du, Leiying Yang, Na Yuan, Haiqing Cui, Wengang Song, dan Li Ge. "Medical Morphology Training Using the Xuexi Tong Platform During the COVID-19 Pandemic: Development and Validation of a Web-Based Teaching Approach." *JMIR Medical Informatics* 9, no. 3 (15 Maret 2021): e24497. https://doi.org/10.2196/24497.
- Maatuk, Abdelsalam M., Ebitisam K. Elberkawi, Shadi Aljawarneh, Hasan Rashaideh, dan Hadeel Alharbi. "The COVID-19 Pandemic and E-Learning: Challenges and Opportunities from the Perspective of Students and Instructors." *Journal of Computing in Higher Education* 34, no. 1 (1 April 2022): 21–38. https://doi.org/10.1007/s12528-021-09274-2.
- Manullang, Sardjana Orba, Mardani Mardani, dan Aslan Aslan. "The Effectiveness of Al-Quran Memorization Methods for Millennials Santri During Covid-19 in Indonesia." *Nazhruna: Jurnal Pendidikan Islam* 4, no. 2 (2021): 195–207.
- Martha, Ati Suci Dian, Kasiyah Junus, Harry Budi Santoso, dan Heru Suhartanto. "Assessing Undergraduate Students' e-Learning Competencies: A Case Study of Higher Education Context in Indonesia." *Education Sciences* 11, no. 4 (April 2021): 189. https://doi.org/10.3390/educsci11040189.
- Mishra, Lokanath, Tushar Gupta, dan Abha Shree. "Online Teaching-Learning in Higher Education during Lockdown Period of COVID-19 Pandemic." *International Journal of Educational Research Open* 1 (1 Januari 2020): 100012. https://doi.org/10.1016/j.ijedro.2020.100012.
- Ng, Davy Tsz Kit, dan Samuel Kai Wah Chu. "Motivating Students to Learn Al through Social Networking Sites: A Case Study in Hong Kong." *Online Learning* 25, no. 1 (Maret 2021): 195–208.
- Omona, J. "Sampling in Qualitative Research: Improving the Quality of Research Outcomes in Higher Education." *Makerere Journal of Higher Education* 4, no. 2 (3 Juli 2013): 169–85. https://doi.org/10.4314/majohe.v4i2.4.
- Pang, Junjie, Yan Huang, Zhenzhen Xie, Jianbo Li, dan Zhipeng Cai. "Collaborative city digital twin for the COVID-19 pandemic: A federated learning solution." *Tsinghua Science and Technology* 26, no. 5 (Oktober 2021): 759–71. https://doi.org/10.26599/TST.2021.9010026.

- Peters, Michael A., Hejia Wang, Moses Oladele Ogunniran, Yingying Huang, Benjamin Green, Jasmin Omary Chunga, Eric Atta Quainoo, dkk. "China's Internationalized Higher Education During Covid-19: Collective Student Autoethnography." *Postdigital Science and Education* 2, no. 3 (1 Oktober 2020): 968–88. https://doi.org/10.1007/s42438-020-00128-1.
- Pham, Quang-Dung, Nhu-Ngoc Dao, Thuy Nguyen-Thanh, Sungrae Cho, dan Hai Chien Pham. "Detachable Web-Based Learning Framework to Overcome Immature ICT Infrastructure Toward Smart Education." *IEEE Access* 9 (2021): 34951–61. https://doi.org/10.1109/ACCESS.2021.3062371.
- Prahmana, Rully Charitas Indra, Dody Hartanto, Dian Artha Kusumaningtyas, Raden Muhammad Ali, dan Muchlas. "Community Radio-Based Blended Learning Model: A Promising Learning Model in Remote Area during Pandemic Era." *Heliyon* 7, no. 7 (1 Juli 2021): e07511. https://doi.org/10.1016/j.heliyon.2021.e07511.
- Putra, Purniadi, Fahrina Yustiasari Liriwati, Tasdin Tahrim, Syafrudin Syafrudin, dan Aslan Aslan. "The Students Learning from Home Experiences during Covid-19 School Closures Policy In Indonesia." Jurnal Iqra': Kajian Ilmu Pendidikan 5, no. 2 (5 September 2020): 30–42. https://doi.org/10.25217/ji.v5i2.1019.
- Putri, R. S., A. Purwanto, R. Pramono, M. Asbari, L. M. Wijayanti, dan C. C. Hyun. "Impact of the COVID-19 Pandemic on Online Home Learning: An Explorative Study of Primary Schools in Indonesia." *International Journal of Advanced Science and Technology*, 2020, 4809–18.
- Rapanta, Chrysi, Luca Botturi, Peter Goodyear, Lourdes Guàrdia, dan Marguerite Koole. "Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity." *Postdigital Science and Education* 2, no. 3 (1 Oktober 2020): 923–45. https://doi.org/10.1007/s42438-020-00155-y.
- Rodrigues, Margarida, Mário Franco, dan Rui Silva. "COVID-19 and Disruption in Management and Education Academics: Bibliometric Mapping and Analysis." *Sustainability* 12, no. 18 (Januari 2020): 7362. https://doi.org/10.3390/su12187362.
- Said, El, dan Ghada Refaat. "How Did the COVID-19 Pandemic Affect Higher Education Learning Experience? An Empirical Investigation of Learners' Academic Performance at a University in a Developing Country." Advances in Human-Computer Interaction 2021 (10 Februari 2021): e6649524. https://doi.org/10.1155/2021/6649524.
- Sharma, Hari Bhakta, Kumar Raja Vanapalli, VR Shankar Cheela, Ved Prakash Ranjan, Amit Kumar Jaglan, Brajesh Dubey, Sudha Goel, dan Jayanta Bhattacharya. "Challenges, Opportunities, and Innovations for Effective Solid Waste Management during and Post COVID-19 Pandemic." *Resources, Conservation and Recycling* 162 (1 November 2020): 105052. https://doi.org/10.1016/j.resconrec.2020.105052.
- Simamora, Roy Martin. "The Challenges of Online Learning during the COVID-19 Pandemic: An Essay Analysis of Performing Arts Education Students | Studies in Learning and Teaching," 7 September 2020. https://sciejournal.com/index.php/SiLeT/article/view/38.

- Sudarmo, Mulyawan Safwandy Nugraha, MARDHIAH, Festus Evly R. I.liow, dan Aslan. "The Identification of Online Strategy Learning Results While Students Learn from Home During the Disruption of the COVID-19 Pandemic in Indonesia." *Journal of Contemporary Issues in Business and Government* 27, no. 2 (8 Maret 2021): 1950–56. https://doi.org/10.47750/cibg.2021.27.02.205.
- Sudarmo, Sudarmo, Ardian Arifin, Petrus Jacob Pattiasina, Vani Wirawan, dan Aslan Aslan. "The Future of Instruction Media in Indonesian Education: Systematic Review." *AL-ISHLAH: Jurnal Pendidikan* 13, no. 2 (31 Agustus 2021): 1302–11. https://doi.org/10.35445/alishlah.v13i2.542.
- Sulasmi, Emilda, dan Agussani. "Managing Virtual Learning at Higher Education Institutions during Pandemic Covid-19 in the Indonesian Context." *Educational Sciences: Theory & Practice* 21, no. 1 (12 Maret 2021): 98–111. https://doi.org/10.12738/jestp.2021.1.008.
- Widjaja, Gunawan, dan Aslan Aslan. "Blended Learning Method in The View of Learning and Teaching Strategy in Geography Study Programs in Higher Education." *Nazhruna: Jurnal Pendidikan Islam* 5, no. 1 (2 Februari 2022): 22–36. https://doi.org/10.31538/nzh.v5i1.1852.
- Zhang, Xiujun. "Thoughts on large-scale long-distance web-based teaching in colleges and universities under novel coronavirus pneumonia epidemic: a case of Chengdu University." Dalam 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020), 416:1222–25. Atlantis Press, 2020.