

Article

# Online Learning Phenomenon: From the Perspective of Learning Facilities, Curriculum, and Character of Elementary School Students

Abdurrahmansyah Abdurrahmansyah <sup>1,\*</sup> , Hamdan Sugilar <sup>2</sup> , Ismail Ismail <sup>1</sup> and Dewi Warna <sup>3</sup>

<sup>1</sup> Department of Islamic Education, Universitas Islam Negeri Raden Fatah Palembang, Kota Palembang 30126, Indonesia; ismail\_uin@radenfatah.ac.id

<sup>2</sup> Department of Mathematic Education, UIN Sunan Gunung Djati Bandung, Bandung 40292, Indonesia; hamdansugilar@uinsgd.ac.id

<sup>3</sup> Department of English Education, Universitas Islam Negeri Raden Fatah Palembang, Kota Palembang 30126, Indonesia; dewiwarna@radenfatah.ac.id

\* Correspondence: abdurrahmansyah73@radenfatah.ac.id

**Abstract:** This article aimed to describe the online learning phenomenon from the perspective of learning facilities, curriculum, and students' characters in schools and the correlation among those three variables. This research employed a qualitative descriptive method. The data were collected through interviews, observations, and questionnaires. The research subject was the fifth-grade class of an elementary school in Palembang, which consisted of 19 students' parents, 8 teachers, and 47 students. The findings showed that almost half of the total number of students experienced limitations in online learning facilities, most elementary school teachers could not develop curriculum and online learning models, and the online learning phenomenon triggered a decline in the students' characters.



**Citation:** Abdurrahmansyah, A.; Sugilar, H.; Ismail, I.; Warna, D.

Online Learning Phenomenon: From the Perspective of Learning Facilities, Curriculum, and Character of Elementary School Students. *Educ. Sci.* **2022**, *12*, 508. <https://doi.org/10.3390/educsci12080508>

Academic Editors: Neil Gordon and Han Reichgelt

Received: 15 June 2022

Accepted: 19 July 2022

Published: 25 July 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Keywords:** learning facilities; online learning; character; curriculum

## 1. Introduction

The online learning phenomenon has devastated the normal order and system of education in various countries [1]. One of the problems in online learning faced by schools worldwide, including in Indonesia, is the issue of learning management [2]. From the parents' perspective, online learning triggers psychological stress due to the increased burden on student assistance in learning, in addition to the pre-existing economic and social burdens that ultimately have an impact on the neglected parenting and learning assistance for children at home [3–5]. In general, Indonesia's educational resources, including teachers, parents, and student input, are still very limited, triggering the emergence of several educational problems [5].

During the online learning system implementation, several studies revealed a decrease in learning quality in the form of a low level of learning processes and outcomes related to student character [6]. However, it did not seem to occur in all cognitive learning variables because, in the context of science learning, there was no impact of self-awareness on student learning outcomes cognitively. Moreover, no correlation was found between learning loss mitigation and student learning outcomes during online learning [7]. Nevertheless, other studies also confirm that learning facilities and teachers' ability to develop learning significantly impact student learning quality [8].

Issues in internet access, lack of facilities, and the inability of teachers to develop online learning also occurred in several countries [9]. Poor learning facilities and the unavailability of basic needs such as laboratories, toilets, libraries, drinking water, and multimedia devices significantly affect the quality of student learning [4]. Multimedia devices are the main facilities for online learning that must be available to ensure the continuity of good online

learning [10]. Students' perceptions and responses to online learning largely depend on their individual experiences since they have different preferences [11].

The success of the implementation of online learning in Indonesia is determined more by the design of the national humanistic curriculum, in addition to the support of learning technology [12] in the form of online learning applications or more effective learning platforms [13,14]. The online learning curriculum has a different design from the standard or regular curriculum. Therefore, the teacher's role has also shifted from delivering the curriculum to being a learning designer. In an online learning curriculum, teachers should consider new designs regarding curriculum structure, content presentation, collaboration, and learning interactions [15]. The present study aimed to describe the online learning phenomenon from the perspective of learning facilities, curriculum, and student character in school and the correlation among these three variables.

## 2. Review of Related Literature

Education has always been the cornerstone of any nation's development; therefore, its long-term viability is critical for all nations' growth and development. Education encompasses a wide range of topics. Several obstacles have plagued centuries, ranging from changes in schools due to wars, such as a country's curriculum, a lack of supported learning facilities, illness outbreaks, and/or political instability. In the middle of the COVID-19 pandemic, the current state of education in Indonesia is not conducive, resulting in educational quality that is less than ideal. The effect of facilitating conditions on student contact was not significant, nor was the influence of System Quality on the aim of student involvement. A fast network, processing resources, and mobile-friendly software are possible virtual environment variables influencing student interaction behavior on online learning platforms [16]. However, challenges such as technical issues, a perceived lack of community, time constraints, and difficulty understanding the objectives of the online courses were identified [17].

In theory, distance learning is a teaching–learning process that relies on structured information technology. Students had a difficult experience due to insufficient facilities and infrastructures in the internet quota, smart phones, laptops, as well as an unsupportive home environment and improper teaching techniques [18]. Moreover, students, as digital natives, may see this as an opportunity to further their education through online learning. In other words, in today's world of learning, the use of technology has become a requirement.

Curriculum, according to Law Number 20 of 2003 on the National Education System, is "a set of plans and regulations about the aims, content, and delivery of education". The lesson material and the methods are used as the guidelines for putting the learning into action (Volume 508 of *Advances in Social Science, Education, and Humanities Research* [19]). During a pandemic like this, curriculum innovation and learning are critical. The curriculum, as an element of the learning system, does not exist in a vacuum because it must always keep up with changes in environmental conditions. The curriculum, which has been structured and systematically established from the beginning, must be immediately adapted to the fact that students must remain at home for an unknown period of time [20].

As a result, when online distance learning occurs from home, a classroom teacher should not overlook instilling character values or character education in students. Every human being is endowed with a unique personality. A character can also distinguish humans from animals if humans and animals do not share the same character [21]. Character education is an ongoing effort to shape students' individual abilities in order to achieve the desired character values. Unfortunately, the students' characters worsened during this pandemic. Character education is a difficult challenge for both teachers and students during the pandemic. This is because a teacher cannot directly observe the development of students' attitudes and character during online learning. Aside from that, teachers faced numerous challenges in implementing online learning, such as limited facilities and technological mastery, network constraints, as well as a lack of character education integration in the online learning environment [22]. In relation to the preceding explanations,

students' perceptions of online learning resources have been significantly influenced by their personal characteristics, online learning facilities, and information literacy [23].

An interesting study was conducted by Baloran [24] (2020) entitled "Knowledge, Attitudes, Anxiety, and Coping Strategies of Students during the COVID-19 Pandemic", using a cross-sectional study approach, one of which tested the attitudes and anxiety of students during learning and attending school during the COVID-19 pandemic. This cross-country research shows that there is mental readiness among students to participate in learning, but the character of anxiety caused by the online learning system is a problem that cannot be underestimated. Students claim to have increased anxiety related to the COVID-19 outbreak and anxiety about the future of their education. Although this research does not directly focus on the issue of character, it is important to consider the aspect of the attitude of students who are disrupted due to COVID-19. The previous investigation used a cross-sectional study approach while this research used a qualitative method. The results of the recent study demonstrated that students' characters decreased in a pandemic condition, contrary to the findings of Baloran's study, which showed that students' anxiety-related characteristics contributed to their engagement in learning activities.

Regarding the facilities, Kartini's [25] (2021) study used the qualitative research method with literature and field studies. The research was conducted in the city of Melawi, West Kalimantan. Data was collected using interview techniques, journal analysis, and related books. The results of the study stated that online learning carried out in cities tends to be more productive because of the ease with which facilities can be accessed and the support of parents. The similarity between this research and Kartini's was the data collection. This research used a questionnaire, interview, and observation. The findings of this study reflect a larger range of facility issues during the pandemic, which distinguishes it from Kartini's research.

In a study from Gul and Khilji [26] (2021) with the title "Exploring the need for a responsive school curriculum to cope with the COVID-19 pandemic in Pakistan", the participants expressed their dissatisfaction with the curriculum's lack of adaptability to situations such as the COVID-19 pandemic. They said it is challenging to respond to such a circumstance because of the top-down approach and preset nature of the curriculum. They believed that the curriculum was extremely tight and did not permit alternate modalities. In contrast to this study's use of interview, observation, and questionnaire, previous data collection methods only involved interviews.

### 3. Materials and Methods

This research was descriptive qualitative research employing a case study approach. It was focused intensively on one object, namely one of the elementary schools in Palembang city. Palembang is a city in the province of South Sumatra with an area of 400.61 sq. km. The total population density of Palembang City in 2021 is 1,668,848 people. The exact participation rate for education in the city of Palembang in 2021 for the elementary school level (ages 7–12 years) is 108.51, while the junior high school level (ages 13–15 years) is 91.88%, and the senior high school level (ages 16–18) is 100.96%. (source: BPS Palembang 2021/PDA 2021, <https://jdih.palembang.go.id>, accessed on 23 May 2022). The data were collected by observations, interviews, and questionnaires. The research subjects consisted of 19 students' parents, 8 teachers, and 47 students. Interviews were not conducted for all research subjects but were represented by only a few people. Due to differences in population or subjects in the research variables, the researchers did not test the correlation between variables. However, the results of interviews with the same parents and students stated that parents sought online learning facilities but did not provide a new smartphone, so they used an existing smartphone.

The study was conducted for six months, from September 2021 to February 2022. The distribution of questionnaires was carried out in October 2021. The interviews were conducted with students' parents to find out the patterns of student mentoring or assistance and the problems they experienced during the online learning process. Researchers also

interviewed the teachers to determine the patterns of curriculum development and learning. In addition, researchers observed the students to investigate the changes in their character during online learning. The questionnaire distribution to parents and teachers was administered using Google Forms. Researchers analyzed the data by involving data reduction, data display, and conclusion drawing/verification. Thus, the data analysis being employed was qualitative descriptive analysis. The investigation of features of learning environments, curricula, and student personalities as they relate to online learning is restricted by this study. Future studies will focus on other crucial elements including management, funding, and policies in order to gain a deeper understanding of the phenomenon of online learning.

## 4. Results

### 4.1. Learning Facilities Aspect

The government's policy to implement online learning in all schools in Indonesia began with the Circular Letter Number 4 of 2020 on the Implementation of Education Policy amidst the COVID-19 outbreak. The schools were required to implement a full online learning system. Technically, the implementation of online learning required devices to ensure the effectiveness of the learning process. Therefore, parents and students needed a computer or smartphone device to communicate with teachers during the online learning process. NH, a student's parent, conveyed this condition:

*"We as parents are required by the school to provide learning devices in the form of smartphones so that our children can participate in learning activities from home. Although our financial condition is insufficient due to the impact of the COVID-19 pandemic, we must strive to provide these online learning tools."* (Interview, October 2021)

Teachers used their smartphones to give instructions on students' assignments. School management did not specifically provide online learning devices to facilitate learning activities. This limitation became one of the factors making online learning activities less optimal. Parents and students often experienced difficulties due to limited internet connection.

Not all parents of elementary school students had a smartphone to use in learning activities. A student's parent, M, said that:

*"I cannot provide smartphones for all my children. Usually, the three of them take turns using smartphones during online learning. The problems arise when they have to learn at the same time. Some of them have to succumb, making them cannot learn at the same time."* (Interview, October 2021)

So far, schools and teachers only used public applications to carry out online learning, indicating that they did not prepare any custom platforms or in-house online learning tool designs. The online learning process tended to be more focused on transferring learning activities from school to home without any effective technical and methodological innovations. AZ, a teacher, stated this fact by saying:

*"During the online learning period, we only teach using smartphones by accessing Zoom Meeting and WhatsApp to provide learning instructions. Frankly, I do not understand any effective online learning models or methods. I admit that many students have missed the opportunity to study well during this pandemic."* (Interview, October 2021)

The September–October interview session showed the fact that there were learning problems caused by learning facilities in the form of the unpreparedness of most parents in providing gadgets and quotas for the implementation of online learning at home. However, in the January–February 2021 interview session, some of the problems of learning facilities were slightly resolved with the wider distribution of quota assistance from the government for online learning.

The student's parent, M, said:

*"The government's policy to assist internet quotas for underprivileged students is quite effective in making the learning process of our children at home run well. At least we are no longer burdened with providing the cost to buy internet quota".* (Interview, February 2021)

At the beginning of online learning, due to the lack of internet facilities, students studied at a mosque near their home, which provided free internet access that could be used for online learning.

Furthermore, to obtain in-depth information about the possession of learning facilities, the students were given a questionnaire showing the following results.

Based on Table 1, to find out what learning facilities students have in the form of smartphones, 65.96% or 31 of the total 47 students do not support online learning activities, 91.49% or 43 of the total 47 students are less comfortable and less supportive of learning by using smartphones during online learning. However, 89.36% or 42 students from a total of 47 stated that during online learning they did not experience intermittent internet signal interference, were not constrained by learning devices, and did not have interference with smartphone devices when sending online learning tasks. There is no significant difference due to the online learning facilities in September 2020 compared to February 2021. A total of 44.68% or 21 students out of a total of 47 students used smartphones alternately with relatives at home during online learning, so that parents or students did not have to provide new smartphones; they simply used their parents' or siblings' smartphones.

**Table 1.** Learning Facilities Owned by Students.

No	Statement	Item (%)	
		Yes	No
1	I have my own smartphone to use in online learning at home	70.21	29.79
2	I have to take turns using the smartphone with my relatives at home during online learning	55.32	44.68
3	My smartphone really supports me in doing online learning activities	34.04	65.96
4	I often experience the unstable internet connection during online learning	10.64	89.36
5	I feel very constrained by the learning device I have in online learning	10.64	89.36
6	I do not have any other learning devices besides a smartphone to support online learning activities at home	10.64	89.36
7	I have trouble with my smartphone when I send learning assignments to the teacher	10.64	89.36
8	I feel uncomfortable studying using a smartphone during online learning	91.49	8.51
9	My parents find it difficult to buy internet quota to facilitate online learning	17.02	82.98
10	A smartphone is less supportive of an effective online learning	91.49	8.51

#### 4.2. Curriculum and Learning Aspects

Administratively, the elementary school teachers did not apply the concept of a "simplified curriculum" in online learning. The lesson plan for online learning was the same as what they commonly used in face-to-face meetings in the classroom. The school management let the teachers use the regular lesson plan without making any simplifications as suggested by the government. There were eight teachers chosen. However, the interview results of curriculum and learning consisted of only seven teachers, including UF, S, IW, N, RK, AA, and AM, while one teacher was unable to attend. A Religious Education teacher, UF, said that:

*"So far, I continue to use the lesson plans I have constructed without simplifying. However, I shorten the duration of learning through Zoom Meeting. Learning materials still refer to the regular curriculum. I instruct the students to read and answer the questions as assignments in my course."* (Interview, October 2021)

The curriculum structure conveyed to students during online learning was listed on the school curriculum document. The teachers did not develop learning materials because the online learning duration was minimal, so curriculum innovation was not carried out thoroughly. In addition, the development of online learning methodologies was not seen as



an innovation in curriculum and learning. Elementary school teachers did not understand Internet-based online learning models. These circumstances were stated by a teacher, S, saying that:

*“I think my fellow teachers, just like me, do not innovate models and approaches in online learning. So far, I have only used the curriculum concepts and learning methods I have applied before. I do not understand the internet-based online learning models and approaches.”* (Interview, November 2021)

In line with the above statement, a teacher, IW, said that:

*“I did not make a one-sheet lesson plan. For online learning, I still prefer the usual lesson plan. We submitted the regular lesson plan documents to the school principal, even during the COVID-19 pandemic. I have created annual programs, semester programs, and academic calendars for administrative purposes. However, all those learning plans and tools could not be implemented effectively because the students did not come and study at school.”* (Interview, November 2021)

Meanwhile, the teachers did not understand the internet-based learning models employing special and relevant designs. A teacher, N, said that:

*“Not yet. I have not received sufficient training on internet-based learning models. So far, what we have done was still limited to using online platforms such as Zoom Meeting, Google Meet, and WhatsApp groups. As for the implementation, it was only in the form of face-to-face meetings through the software. We do not yet understand the new internet-based learning models with more targeted learning designs and planning.”* (Interview, November 2021)

Through observations conducted by researchers, when the teachers carried out online teaching using Google Meet, almost the entire 60 min of learning time was used to provide instructions on the assignments that students must do and explain the learning materials. The teachers did not use any slides in giving explanations. In between the lessons, the teacher often reminded students to activate the video feature, straighten their sitting position, and tell them to ask questions.

In terms of developing student abilities, online learning systems tended not to develop student attitudes and skills. The dominance of the cognitive domain was very noticeable in the online learning process. A teacher, RK, stated that:

*“Yes, indeed, I focus more on the knowledge aspect when teaching Religious Education materials using Zoom Meeting. I deliver the materials, and students answer the post-test questions at the end of the lesson. I have a hard time assessing their attitudes one by one by using the attitude observation rubric.”* (Interview, November 2021)

The teacher’s statement above, at the same time, illustrated the less optimal ability to make evaluation tools for the affection and skills domains.

Based on observations, the elementary schools in Palembang did not have technical guidelines and instructions for implementing online learning. Referring to the local news, online learning in schools in Palembang has reduced the learning quality by around 30% (Gatra.com, 2021 accessed on 24 May 2022). The incomplete curriculum implementation caused the decreased quality since the learning process was not following the predetermined time allocation. The implementation of online learning in elementary schools had also not been covered by a specific curriculum, causing ineffectiveness.

Regarding the curriculum design applied to the online learning system in elementary schools, all teachers stated that there was no attempt to adjust the curriculum following the online learning conditions. Thus, the teachers taught the courses by referring to the 2013 Curriculum. A teacher, N, said that:

*“I did not compile any materials for the curriculum in the implementation of online learning. I deliver material according to the existing curriculum structure online via Google Meet or Zoom.”* (Interview, November 2021)

The above statement was confirmed by a teacher, AA, by saying that:

*“I find it a bit difficult to achieve the completion targets on all the materials, as the students do not learn for the same duration as they do in class. I still deliver the learning materials, although not entirely. Frankly, instead of compiling any materials following the simplified curriculum, I just taught the materials that existed in the current curriculum”.*

The difference between face-to-face and online learning implementation in elementary schools lies in the shortened duration of time, condensed materials, and the application of distance learning. A teacher, AM, said that:

*“Yes, we did not construct the simplified lesson plan. I teach as usual although with a shortened time. Sometimes, students do not pay attention when I teach.”* (Interview, November 2021)

The implementation of learning with a set of materials listed in the curriculum at the beginning of the implementation of online learning was felt to be very dense and not in accordance with the allocation of online learning time. However, the longer it goes on, the implementation of learning and presentation of material begins to show an increase in the quality of its implementation. One teacher, NH, said that:

*“Now the implementation of learning has started smoothly. Compared to the beginning of the implementation of online learning a few months ago, students are now showing symptoms of getting used to online learning, although they still use lecture and assignment methods. To be honest, I don’t really know much about digital-based online learning models. I hope the school can involve us in training activities for developing learning methodologies”.* (Interview, February 2021)

The above statement illustrated that the elementary school teachers were not accustomed to curriculum innovation and learning development. To obtain in-depth information about the understanding of curriculum and learning, researchers distributed questionnaires to the teachers, and the results were as follows.

Based on Table 2, the number of teachers who filled out the questionnaire was eight teachers, or all the participants. To find out the teacher’s understanding of the curriculum and online learning, the results obtained were 62.50%, or five teachers, who stated that they did not understand online-based learning models, the curriculum structure of subjects needed to be enriched with online learning materials, they had never received training on development of online-based learning models, and, according to the teacher, during online learning students do not receive quality learning processes and outcomes compared to face-to-face learning. In total, 50% or four teachers stated that online learning is more dominant in conducting cognitive assessments, rather than assessing attitudes and skills.

**Table 2.** Understanding of Curriculum and Learning.

No	Statement	Item (%)			
		SA	A	D	SD
1	The curriculum structure is good enough, so there is no need for enrichment of learning materials in online learning	12.5	25	62.5	0
2	I do not understand the online-based learning models	0	62.5	37.5	0
3	I rarely develop learning methodologies on every material I teach during online learning	12.5	25	50	12.5
4	I always use the lecture method and rarely use other varied methods in online teaching	0	25	62.5	12.5
5	I use the same lesson plan during online and offline learning	25	25	37.5	12.5
6	During the online learning period, I never made a lesson plan following the simplified 2013 Curriculum	12.5	12.5	75	0
7	I have never received any training on the development of online-based learning models	12.5	62.5	25	0

Table 2. Cont.

No	Statement	Item (%)			
		SA	A	D	SD
8	During online learning, I am more inclined to do cognitive assessments rather than attitude and skills assessments	12.5	50	25	12.5
9	I do not understand how to create an attitude and skill assessment rubric, so I do not conduct a holistic learning assessment	0	37.5	62.5	0
10	During online learning, students are less likely to experience the qualified learning processes and outcomes compared to face-to-face learning	37.5	62.5	0	0

#### 4.3. Character Decline Aspect

Parents and students were in a reasonably complicated position to adapt during online learning. Most parents did not have a good ability to accompany the students' learning process at home. A student's parent, DP, said that:

*"I do not know. I do not understand curriculum changes in the online learning period. As far as I know, our children learn from home using smartphones. We rely on teachers and school policies regarding how to teach our children. However, we feel that there is a decrease in children's enthusiasm for learning during this pandemic."* (Interview, November 2021)

The above statement depicted that students' parents still did not care about their children's learning process at home. They only provided smartphones, internet quota, and phone credits for their children to study. The fact that parents found it difficult to control students' learning process at home was corroborated by research conducted by Gunawan (2021) [27]. Thus, it had an impact on the ineffectiveness of online learning, including a decrease in students' enthusiasm to study at home.

MA, a student's parent, confirmed the decline in students' character by saying that:

*"The children cannot study well. None of the material was conveyed properly. Children participate in learning through mobile phones even while playing online games without the teacher knowing."* (Interview, November 2021)

The students who studied online using smartphones while playing online games indicated a lack of discipline and responsibility and a low quality of parental mentoring while students were studying at home.

Based on observations, parents and teachers had difficulty controlling students' learning process during online learning. Almost every day, there were reports regarding the phenomenon of the declined behavior of students at home and in the surrounding environment. The children leaving the house and wandering around became an issue of character education that considerably declined during the COVID-19 pandemic (Kompas.id, 2021). A student's parent, M, said that:

*"I do feel a decline in our children's character during the implementation of learning from home. Children are becoming increasingly difficult to manage. The children used to go to school and study, but they often wandered around with their friends since the implementation of online learning. School assignments are rarely done. However, their teachers do not seem to control the tasks very carefully. Children's behavior has only gotten worse during the COVID-19 pandemic."* (Interview, November 2021)

The parent's statement above showed a decline in characters affecting the decreased quality of student behavior during the online learning period. The issue of character decline in the form of low enthusiasm, discipline, and responsibility was somehow caused by the ineffective management of online learning systems carried out by teachers.



Psychologically, students lost concentration and did not focus during online learning. A teacher, AA, said that:

*“There are many weaknesses and ineffectiveness in online learning. I often see students not paying attention to online learning. In the middle of learning, students begin to show that they are bored and then do not pay attention to the teacher’s explanation. Moreover, they started turning off live videos so that only their names remained displayed on the Zoom screen. When I give them questions about the material, most of them say that they cannot absorb the materials well so that they cannot answer the questions I give.”* (Interview, November 2021)

The decline in student character in the form of a lack of enthusiasm for online learning was confirmed by a student, MKD, as follows:

*“Sometimes I understand, sometimes I do not. I had a hard time understanding the material explained by the teachers because they delivered it very quickly. I listen without being able to master the material well. Teachers only explain and rarely use learning videos. I am tired of learning that way. The teachers often give assignments, but I get confused about how to finish them.”* (Interview, November 2021)

The above statement described the students’ mood who got bored with the online learning system because they did not understand the materials presented by the teacher and had no time to ask for an explanation since they had limited time.

The impact of online learning on the decline in students’ character was explicitly stated by a student’s parent, HW, saying:

*“There is indeed a change in children’s attitudes toward online learning. They spend more time playing on smartphones. Sometimes, when we ask them to do something, they respond slowly. The orders given by their mother are often ignored. They became somewhat impolite and did not immediately obey their parents’ orders.”* (Interview, November 2021)

Another bad character shown by students during learning from home was a quick temper, indicating a stressful feeling in participating in online learning. This condition was discussed by a student’s parent, H, who stated that:

*“It seems that there has been a change in my child’s attitude since participating in online learning. I often get scolded by my child for not being able to help him/her with his/her homework and answering the exam questions. Before the online learning, my child has never been irritable and upset, but now he/she is often sad when he/she cannot submit assignments from the teacher on time. So, I have to persuade him/her again when he/she is sulking and does not want to finish the school assignments.”* (Interview, November 2021)

Student behaviors in the form of irritability, sadness, and even anger at parents are undoubtedly bad attitudes. Despite the negative and positive impacts caused by online learning, schools, teachers, parents, and students should consider the essential goals of the school to keep providing students with the knowledge they might need.

Based on Table 3, the number of parents who filled out the online questionnaire was 19 parents, or 40.47% of the total 47 students. To find out the perspective of students’ character based on the views of parents on online learning, the results obtained showed that more than 50% stated that students did not show a more disciplined attitude and did not look more diligent and enthusiastic in participating in learning during online learning; students tended to be stressed, angry, and confused when doing school assignments; students are uncomfortable and do not understand the subject matter when the teacher explains online; often parents cannot accompany students while studying at home and are unable to help do student assignments; and parents feel burdened and forced to accompany students.

**Table 3.** Online Learning.

No	Statement	Item (%)			
		SA	A	D	SD
1	Students show a more disciplined attitude in online learning	5.26	15.79	68.42	10.53
2	Students seem to be more diligent and enthusiastic when they participate in online learning	10.53	10.53	52.63	26.32
3	I accompany students to study online at home for more than 1 h every day	5.26	31.58	47.37	15.79
4	Students tend to be stressed and confused about finishing school assignments in online learning	57.89	31.58	10.53	0.00
5	Students are often angry when their parents remind them to participate in online learning activities	47.37	36.84	15.79	0.00
6	I am often unable to accompany students learning at home and unable to help with student assignments	52.63	31.58	15.79	0.00
7	During online learning, students tend to show unfavorable behaviors such as being lazy, unmotivated, and playing a lot at home	68.42	21.05	10.53	0.00
8	Student character tends to be better and manageable during face-to-face learning rather than in online learning	52.63	26.32	10.53	10.53
9	Parents feel burdened and forced to accompany students in online learning	52.63	26.32	15.79	5.26
10	Students feel uncomfortable and difficult to understand when the teacher explains learning materials online	63.16	31.58	0.00	5.26

During online learning at home, the lack of direct interaction between students–teachers and students–students causes boredom, which decreases the learning motivation. Psychologically, a boredom learning atmosphere triggers the emergence of emotional attitudes such as irritability, being lazy to study, lack of enthusiasm, and lack of discipline [28,29]. The real purpose of online learning is to provide students with a fast and effective learning experience without having face-to-face meetings at school. This process will be very effective if it is supported by all elements of education such as the ability of teachers, student readiness, adequate learning facilities, and relevant teaching materials or curriculum. However, in some schools, the carrying capacity for the effectiveness of online learning is still low, which has an impact on the weak character of students.

From the perspective of students, online learning is quite boring and causes boredom. This phenomenon happens because of the monotonous learning process, the lack of innovation in learning methods, and the subject matter that is felt to be very dense while the duration of online learning is quite short. The fact of the online learning process as above further raises the problem of student character. One student, MKD, said that:

*“There are so many tasks from teachers. I often do not understand how to do assignments. I feel really lazy when the online study time comes. This online learning makes me quickly bored and lacks enthusiasm for learning because I cannot interact optimally with teachers and friends.”* (Interview, January 2021)

## 5. Discussion

### 5.1. Learning Facilities Aspect

Online learning worsened the image of education, as students were unable to access the internet due to technical and financial problems. The absence of face-to-face meetings between students and teachers in the classroom made the learning process and outcomes very bad [30]. Referring to the report by UNESCO (2020), online learning policies have resulted in 1.5 billion students from more than 165 countries having to drop out of school [31].

Most of them could not participate in the online learning process due to the unavailability of the required learning devices. Almost all countries, including the members of the Commonwealth, also experienced the adverse impacts of education [32]. Thus, Li et al. emphasize that, in a pandemic where many problems arise, we must utilize effective teaching theories to find proper ways to design courses that can stimulate student motivation, are suitable to implement while students study at home, and can meet the requirements of curriculum reform (conducive to the intellectual development of students, allowing students to develop their core competencies, and facilitating the systematic construction of knowledge) [33].

The unpreparedness of schools, teachers, and parents in providing technical learning devices in the form of software and hardware has worsened the quality of online learning implementation in Indonesia [24–28]. Technical constraints in the form of slow internet connection in schools in remote areas and lack of funds made schools and parents unable to prepare the learning tools properly [34]. Meanwhile, the digitalization of learning was supposed to be carried out by utilizing the internet, software, or digital content as educational resources. Teachers and parents were expected to be able to ensure the availability of learning devices for students in the form of smartphones and other supporting devices [35].

Fundamental problems faced by schools in implementing online learning are the distance learning process, limited learning tools, limited internet access, and internet quotas [36]. Indonesia's geographical conditions, in which the islands are separated, made it challenging to install internet network equipment, which resulted in people in remote areas being unable to access the internet.

The Sustainable Development Goals (SDGs, 2020) showed that the online learning phenomenon disrupted education access. Around 500 million students were unable to keep up with online learning. The Ministry of Education and Culture also reported that 42,159 or 19% of elementary and high schools did not have internet access, and 8552 or 4% of schools did not have electricity. Moreover, in 2018, the Central Bureau of Statistics (BPS) announced that 61.8% of the population was in Papua, 58.2% in Maluku, 39.8% in West Sulawesi, and 49.4% in North Kalimantan, and several more villages on the island. In Bogor, 11% of students could not participate in online learning due to a lack of resources such as gadgets and internet quota. All socioeconomic levels experienced difficulties in accessing the internet for online learning. However, schools and students from low-income families encountered more significant impacts in terms of computer access, internet connection, and comfortable learning places [37].

The unavailability of infrastructures to support the implementation of online learning became a primary factor in the failure of online-based education systems in various countries [38], including Indonesia. The use of smartphones during the implementation of online learning was critical. Schools in areas with low economic levels urgently needed family cooperation to provide smartphones so that their children's online learning activities could be carried out. During online learning, there was at least around 87% smartphone penetration among school teachers [39]. Although smartphones can be vulnerable to being misused to access inappropriate games and shows, people could be greatly helped during online learning.

The digital divide was a problem faced by almost all schools as a form of shock experienced in implementing online learning [40]. The digital divide was more likely to be caused by non-optimal physical access to learning devices, the skills of teachers and students in using learning devices, and low motivation. Thus, the forced online learning process as a digital education trend triggered the inequalities in access to education, which was caused by the uneven access to technological devices. Students' limited access to technological devices such as good quality computers, tablet PCs, or smartphones became a major obstacle to online learning [41]. Based on Table 1, to find out what learning facilities students have in the form of smartphones that do not support, the results showed that students are less comfortable and less supportive of learning by using smartphones during online learning. This shows that the facilities owned by students have an impact

on the inconvenience of online learning and non-optimal learning outcomes. During learning, there is no signal interference and intermittent internet, which shows that the signal interference factor is not an obstacle. To overcome the problems of learning facilities for online learning is to streamline the distribution of internet quota assistance by the government for students who cannot afford it and seek to strengthen the online learning network system by school management.

### 5.2. Curriculum and Learning Aspects

Online learning refers to the concept of a technological curriculum. The curriculum is developed by employing a conceptual analysis with an integrative approach relevant to elementary to higher education levels to build student and parent participation [42]. Schools need curriculum development and learning relevant to the online learning challenges, such as developing an integrative curriculum [43] and applying an online education curriculum involving the 5G Internet of Things [44]. New concepts of curriculum development and learning in the era of online learning, such as Virtual Mobility (VM) and Open Education (OE), can significantly facilitate learning effectiveness as they offer flexibility and conformity to the characteristics of modern global schools [45].

In the implementation of online learning, teachers tended to have difficulty achieving affective and psychomotor objectives [46]. The teachers decided not to design a particular curriculum for online learning, and they still applied the pre-existing curriculum instead. Moreover, the employed learning approach is dominantly referred to as a teacher-centered approach. From the aspect of learning evaluation, teachers only utilized homework, final unit quizzes, and participation in online learning. Furthermore, the teachers agreed that they could not manage reliable and valid evaluation tools. Learning methods and techniques such as brainstorming, dramatization, exhibitions, and problem-based learning were barely used by teachers during online learning [47]. The non-optimal use of learning technology and the lack of learning innovation in online learning made students dissatisfied with the virtual education process [48].

Teachers' ability to innovate the curriculum and learning is necessary to implement online learning [49]. For curriculum development to be effective and for the school to be successful, teachers must be involved in the necessary processes [50]. However, not all teachers could carry out their functions as curriculum developers properly due to the critical obstacles they experienced. Online learning requires teachers to reconsider learning objectives, materials, processes, and evaluation systems relevant to the concept of virtual education [51]. Teachers might have limited technological pedagogical knowledge and have technical difficulties hindering their innovations in the online learning period [52]. Ideally, teachers should utilize teaching materials taken from digital sources such as slides, books, and quizzes and use web applications such as zZbook and videos [53]. On the contrary, schoolteachers in many places in Indonesia did not involve those digital resources.

The face-to-face learning curriculum is less relevant to be applied in online learning. School teachers should be encouraged to create learning innovations, and schools need to initiate training such as teacher professional development programs in implementing online learning or blended learning [54]. At the very least, schools and teachers should strive to design an alternative curriculum for online learning. The alternative curriculum developed through the implementation of online learning can be viewed from the teachers' ability to integrate technology into teaching creatively [55].

One example of curriculum innovation that was successfully developed in schools implementing online-based learning was the application of a TBIT (Thinking-Based Instruction Theory)-based curriculum that was proven to increase students' learning motivation and improve their higher-order thinking skills [34]. The curriculum development and integrative learning model based on technology is very relevant to the learning processes and outcomes oriented to the Higher Order Thinking Skills (HOTS) concept being socialized by the Indonesian national education authorities.

Based on Table 2, to find out the teachers' understanding of the curriculum and learning, it is stated that the teachers do not understand online-based learning models; the teachers believed that the curriculum structure of the subject needs to be enriched with online learning materials; the teachers have never received training on the development of online-based learning models; according to the teacher, during online learning students do not receive quality learning processes and outcomes; and online learning is more dominant in conducting cognitive assessments, rather than assessing attitudes and skills. This is because teachers are not ready to face online learning, both from skills in applying online learning technology, implementing curriculum, and assessing online learning, because this is a new thing for teachers. For this reason, it is necessary to prepare teachers technically for carrying out online learning, starting from using devices to evaluating learning outcomes.

During online learning, "learn from home" was chosen as a learning method used during the COVID-19 pandemic and continuing in the post-pandemic; teachers tend to be less prepared with online learning systems with simplified curriculum policies. The unpreparedness of teachers in adapting to the new curriculum is more due to ineffective socialization from the government regarding the design of learning plans and patterns of applying online learning. In addition, the ability of teachers who are lacking in mastering online learning models causes them to be unable to apply a curriculum that is relevant to online learning conditions. In general, teachers in Palembang still have problems mastering competencies in developing curriculum and learning models that are still weak. However, the quality of the online learning process will continue to improve, as teachers and students get used to doing online learning activities at home. Teachers are automatically motivated to develop learning models and strategies as they understand the challenges and problems of online learning. Teachers' creativity in making learning videos and other digital materials is an important improvement as a response to online learning problems.

The differences between the 2013 curriculum used and the emergency curriculum are presented in the following table:

Based on Table 4 the aspects of learning and teaching tools provided by the government differ between the 2013 curriculum, which is implemented in normal situations, and the curriculum in special situations or emergencies. The government provides teaching tools in the form of modules, with Learning being focused on education and essential Learning in Emergency Conditions being carried out contextually and meaningfully by using various strategies that are by the needs and conditions of students, education units, and regions as well as fulfilling learning principles.

**Table 4.** The 2013 curriculum used and the emergency curriculum.

Aspects	Curriculum 2013	Emergency Curriculum
Learning	<ul style="list-style-type: none"> <li>The learning approach uses one approach, namely the scientific approach.</li> <li>In general, learning is focused on face-to-face intracurricular; for co-curricular, a maximum learning load of 50% is allocated from-face to-face due to teachers' creativity.</li> </ul>	<p>Learning focuses on essential and contextual education and learning so that teachers and students are not burdened with demands to complete all curriculum achievements and parents are facilitated in mentoring learning at home. Learning in Emergency Conditions is still carried out based on the following principles: active, healthy relations between the parties involved, inclusive, and in accordance with the abilities of students.</p>
Teaching Devices provided by the government	Textbooks and non-text books.	Textbooks and non-text books, literacy and numeracy learning modules that can be used by students, parents, and teachers at the elementary school level to facilitate student learning during the COVID-19 period or other special conditions.
Curriculum Tool	Curriculum implementation guidelines, assessment guides, and learning guides for each level.	Curriculum implementation guidelines, assessment guides, and learning guides for each level.

Source: <https://kurikulum.kemdikbud.go.id/kurikulum-darurat/>. (accessed on 24 May 2022).

### 5.3. Character Decline Aspect

According to a UNICEF survey, 66% of 60 million students from various levels of education in 34 provinces in Indonesia admitted that they were not comfortable learning online



at home, and 87% of them wanted to return to school immediately [56]. Correspondingly, there was a phenomenon in America in which it could not be detected whether school students participated in learning activities or not because most of them just disappeared from learning in the COVID-19 pandemic [57]. The challenges and problems that emerged with the online learning system became frightening and potentially triggered students' anxiety and discomfort. The learning process carried out in uncomfortable conditions will never be effective. Furthermore, it will affect students' psychology, leading to decreased motivation and interest in learning [58].

The role and engagement of parents in assisting with online learning in Indonesia were still relatively weak and not optimal. Aji [59] revealed that 164 respondents, or 92.1% of 178 respondents, stated that parents could not develop their children's character without the involvement of educators. A total of 88.2% or 157 respondents stated that children's character could not be built at home without school participation. Furthermore, 98.3% or 175 respondents stated that the role of educators in building character was still vital as long as the students learn from home. Meanwhile, 59.4% or 104 respondents stated that educators provided a smaller portion of character education material than other learning materials; 8%, or 14 respondents, even argued that the educators did not provide character education. Only 32.6% or 57 respondents said that character education was provided in equal portions as lesson materials.

Character strengthening can be done through formal education involving environmental support, such as school staff, teachers, and parents. In addition, it must be introduced to students when they are young [60]. Characters can be built through habituation by the teacher, taking advantage of intensive interaction with students at school. School failure during the online learning period was more likely affected by the inability to carry out learning management, allowing teachers to control student behavior at home [61]. Therefore, all education components consisting of the government, schools, teachers, students, parents, and the community must find solutions to various educational problems in the online learning period [62]. Parents are key figures in assisting student learning at home [63]. Meanwhile, schools must find alternative learning models in response to the challenges of online learning without causing any problems in the formation of student character [64] because, after all, the online learning carried out using WhatsApp Group and Google Classroom in elementary schools was likely to be ineffective [65].

Zoom Meetings in online learning made students tend to be silent and inactive [66]. The students were silent and not interested in participating in the lessons because they felt that their teachers had a bad temper in teaching. As all students were silent, the noninteractive atmosphere in a Zoom Meeting could further trigger teacher anger. Such conditions worsened the atmosphere, so the teacher must think of other ways to get students active again and enjoying the learning process. Almost all students experienced negative emotions in various symptoms such as boredom, sadness, lack of understanding, stress, confusion, lack of time management, being overwhelmed, having trouble learning, and lack of enthusiasm [66].

The symptoms of learning loss consequently appeared and also triggered the character loss due to the boredom experienced by students during the online learning. Students paid less attention to learning, so the lesson materials were not well understood. As a result, the effectiveness of education in the online learning period has greatly decreased in quality. Various barriers in terms of pedagogy, facilities, students as individuals, and environment were crucial aspects affecting the failure of the online learning process in Indonesia [67].

In investigating the presence of anxiety caused by the online learning system [67], the students claimed to experience anxiety regarding the future of their education. The increased panic among students was also alleged to have occurred in almost all countries as an effect of the ineffective online learning, which in turn gave birth to individuals who were easily anxious and panicked; to the level that if they were left alone, the symptoms would be difficult to overcome psychologically [68]. Teachers complained about students



not attending online learning on time, even showing their emotional disinterest in the online learning process [46].

Virtual education created negative experiences among students, including the lack of distance learning infrastructure and the lack of standards for preparing high-quality content [46]. The lack of innovation in facilities and learning strategies made students experience decreased learning motivation [46].

The crisis of character and morals has become a global crisis since the moral system was not considered to be related to the aspects of modern human life today and in the future [69]. Based on Table 3, to find out the perspective of students' character based on the views of parents on online learning, the results demonstrated that students do not show a more disciplined attitude, do not look more diligent and enthusiastic in participating in learning during online learning, and tend to be stressed, angry, and confused when doing assignments. Regarding school assignments, students are uncomfortable and do not understand the subject matter when the teacher explains online. Often, parents cannot accompany students while studying at home and are unable to help complete student assignments; parents feel burdened and are forced to accompany students. This is due to the weakening of the character that exists in students because online learning, which deals only with the aspect of knowledge transfer, cannot touch the affective aspect. As a result, the development of student character cannot be observed and paid attention to. Another factor is that the role of parents has not been maximized in guiding students to study due to busy work and lack of understanding of the material that students learn.

## 6. Conclusions

The implementation of online learning that must be carried out simultaneously at all levels of education harmed the character education in elementary schools, morally, socially, academically, and psychologically. Online learning at the elementary school level was interesting to investigate because the required facilities were not yet accessible to all students. Using learning devices such as smartphones with a good internet connection caused many problems in implementing online learning. In addition, the academic phenomenon emerged in online learning in the form of teachers' inability to develop the curriculum and online learning patterns. Almost all elementary school teachers did not develop lesson plans, learning strategies, media, and evaluation systems following the context of online learning. Another phenomenon in the form of the decline in students' character arose due to the issues related to facilities, curriculum development, and learning. Almost half of the students' parents involved in the research samples experienced difficulties assisting their children's learning process at home.

**Author Contributions:** Conceptualization, A.A.; methodology, D.W.; validation, I.I.; formal analysis, H.S. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and approved by the Universitas Islam Negeri Raden Fatah ethics Committee (192/Un.09/PP.06/07/2022, 13 September 2021).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author. The data are not publicly available due to ethical restrictions.

**Acknowledgments:** The authors would like to thank Rector of Universitas Islam Negeri Raden Fatah Palembang and Rizqy Dwi Amrina for their support and feedback on the style used for source documentation during the writing of this paper.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Diamanti, K.; Nikolaou, S.M. Researching the Social Impact of the COVID-19 Pandemic on Students in Greece. *Eur. J. Dev. Stud.* **2021**, *1*, 26–32. [[CrossRef](#)]
2. Skar, G.B.U.; Graham, S.; Huebner, A. Learning Loss During the COVID-19 Pandemic and the Impact of Emergency Remote Instruction on First Grade Students' Writing: A Natural Experiment. *J. Educ. Psychol.* **2021**. [[CrossRef](#)]
3. Brown, S.M.; Doom, J.R.; Lechuga-Peña, S.; Watamura, S.E.; Koppels, T. Stress and parenting during the global COVID-19 pandemic. *Child Abus. Negl.* **2020**, *110*, 104699. [[CrossRef](#)] [[PubMed](#)]
4. Nepal, B.; Maharjan, R. Effect of School's Physical Facilities on Learning and Outcomes of Students in Nepal. *J. Stud. Manag. Plan.* **2015**, *1*, 266–279.
5. Wahyudi, A. Learning loss during COVID-19 pandemic in Indonesia and the strategies to minimize it. *J. Engl. Educ. Linguist.* **2021**, *2*, 18–25.
6. Efriana, L. Problems of Online Learning during COVID-19 Pandemic in EFL Classroom and the Solution. *JELITA J. Engl. Lang. Teach. Lit.* **2021**, *2*, 38–47.
7. Simal, F.; Mahulauw, D.; Leasa, M.; Batlolona, J.R. Self Awareness and Mitigation of Learning Loss on Students' Science Learning Outcomes during the COVID 19 Pandemic. *J. Penelit. Pendidik. IPA* **2022**, *8*, 239–246. [[CrossRef](#)]
8. Lishar, S.S.; Wulandari, S.Z.; Perwita, D. The Effect of Learning Facilities, Teacher Competency and Learning Motivation of the Student Understanding on Online Learning in the COVID-19 Pandemic. *Int. Sustain. Compet. Advant.* **2021**, *11*, 574–585.
9. Koomson, C.K. The impact of COVID-19 on learning-the perspective of the Ghanaian student. *Eur. J. Educ. Stud.* **2020**, *7*, 88–101. [[CrossRef](#)]
10. Muslimin, E.; Fajrussalam, H.; Syah, M.; Erihadiana, M. The Implementation of Educational Facilities and Infrastructure Management in Supporting Learning Process during Pandemic COVID-19 (Study at SMA Plus As-Salaam Bandung) (Implementasi Manajemen Sarana dan Prasarana Pendidikan dalam Menunjang Proses Pembelajaran). *Bull. Sci. Educ.* **2021**, *1*, 116–123. [[CrossRef](#)]
11. Bhagat, K.K.; Wu, L.Y.; Chang, C.Y. The impact of personality on students' perceptions towards online learning. *Australas. J. Educ. Technol.* **2019**, *35*, 98–108. [[CrossRef](#)]
12. Rasmitadila, R.; Aliyyah, R.R.; Rachmadtullah, R.; Samsudin, A.; Syaodih, E.; Nurtanto, M.; Tambunan, A.R.S. The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia. *J. Ethn. Cult. Stud.* **2020**, *7*, 90–109. [[CrossRef](#)]
13. Chau, J.; Cheng, G. Towards understanding the potential of e-portfolios for independent learning: A qualitative study. *Australas. J. Educ. Technol.* **2010**, *26*, 932–950. [[CrossRef](#)]
14. McDonald, A.; McGowan, H.; Dollinger, M.; Naylor, R.; Khosravi, H. Repositioning students as co-creators of curriculum for online learning resources. *Australas. J. Educ. Technol.* **2021**, *37*, 102–118. [[CrossRef](#)]
15. Looi, C.K.; Chan, S.W.; Wu, L. Crisis and Opportunity: Transforming Teachers From Curriculum Deliverers to Designers of Learning. In *Radical Solutions for Education in a Crisis Context*; Lecture Notes in Educational Technology; Springer: Berlin/Heidelberg, Germany, 2021; pp. 131–145.
16. Wut, T.M.; Lee, S.W.; Xu, J.B. How do Facilitating Conditions Influence Student-to-Student Interaction within an Online Learning Platform? A New Typology of the Serial Mediation Model. *Educ. Sci.* **2022**, *12*, 337. [[CrossRef](#)]
17. Song, L.; Singleton, E.S.; Hill, J.R.; Koh, M.H. Improving online learning: Student perceptions of useful and challenging characteristics. *Internet High. Educ.* **2004**, *7*, 59–70. [[CrossRef](#)]
18. Sihombing, A.A.; Fatra, M. Distance Learning During the Pandemic Era: Online Learning Experiences of State Madrasah Tsanawiyah Students During COVID-19 in Indonesia. *Anal. J. Soc. Sci. Relig.* **2021**, *6*, 95–112. [[CrossRef](#)]
19. Nasional, I.D.P. *Undang-Undang (UU) No. 20 Tahun Tentang Sistem Pendidikan Nasional*. 2003, p. 37. Available online: <https://peraturan.bpk.go.id/Home/Details/43920/uu-no-20-tahun-2003> (accessed on 24 May 2022).
20. Sudrajat, T.; Komarudin, O.; Zaqiah, Q.Y. Inovasi Kurikulum dan Pembelajaran pada Masa Pandemi COVID-19. *J. Ilm. Wahana Pendidik.* **2020**, *6*, 339–347.
21. Zubaedi, D.P.K. *Konsepsi dan Aplikasinya Dalam Lembaga Pendidikan*; Kencana Prenada Media Group: Jakarta, Indonesia, 2011.
22. Yuhdi, A.; Ayudia, A.M.; Majid, I.; Cahyo, A.N.; Sartika, F.; Zulrahman, M.F. The decrease of the students' character during COVID 19 pandemic: A survey of students in Binjai. *Bp. Int. Res. Critics Inst. Humanit. Soc. Sci.* **2021**, *4*, 8287–8294.
23. Shi, Y.; Pu, Q.; Chen, L.; Jiang, Y.; Yang, H.H. Research on influencing factors of elementary school students' perceptions of online learning resources during the COVID-19 pandemic. In *Proceedings of the 2021 10th International Conference of Educational Innovation through Technology, EITT 2021, Chongqing, China, 2 February 2022*; pp. 117–122.
24. Baloran, E.T. Knowledge, Attitudes, Anxiety, and Coping Strategies of Students during COVID-19 Pandemic. *J. Loss Trauma* **2020**, *25*, 635–642. [[CrossRef](#)]
25. Kartini, K. Analisis Pembelajaran Online Anak Usia Dini Masa Pandemi COVID-19 Kota dan Perdalaman. *J. Obs. J. Pendidik. Anak Usia Dini* **2021**, *6*, 809–818. [[CrossRef](#)]
26. Gul, R.; Khilji, G. Exploring the need for a responsive school curriculum to cope with the COVID-19 pandemic in Pakistan. *Prospects* **2021**, *51*, 503–522. [[CrossRef](#)]
27. Gunawan, F. Efektivitas E-Learning Dalam Pembelajaran Jarak Jauh Pada Masa COVID 19 Terhadap Minat Belajar Siswa Kelas Iv Min 2 Palembang. *J. Perspekt.* **2021**, *14*, 22–40. [[CrossRef](#)]

28. Nugroho, A.; Ayasti, E.C. Analisis Perilaku Siswa Sekolah Dasar Selama Pandemi Coronavirus Disease-19 (COVID-19). *J. Ilm. Kontekst.* **2022**, *3*, 85–92. [CrossRef]
29. Nasikhin, N.; Ikhsom, I.; Sutiyono, A. Sekolah online di masa pandemi COVID-19, bagaimana tanggapan guru dan siswa sekolah dasar? *J. Muara Pendidik.* **2022**, *7*, 47–59. [CrossRef]
30. Adnan, M. Online learning amid the COVID-19 pandemic: Students perspectives. *J. Pedagog. Sociol. Psychol.* **2020**, *2*, 1309. [CrossRef]
31. Report Team of UNESCO. *COVID-19 Educational Disruption and Response*; UNESCO: Paris, France, 2020. Available online: <https://en.unesco.org/covid19/educationresponse> (accessed on 24 May 2022).
32. Osman, A.; Keevy, J. *The Impact of COVID-19 on Education Systems in the Commonwealth*; Commonwealth Secretariat: London, UK, 2021; ISBN 9781849292054. Available online: <https://books.thecommonwealth.org/> (accessed on 24 May 2022).
33. Li, Y.; Zhang, X.; Dai, D.Y.; Hu, W. Curriculum Innovation in Times of the COVID-19 Pandemic: The Thinking-Based Instruction Theory and Its Application. *Front. Psychol.* **2021**, *12*, 1–18. [CrossRef]
34. Wan, Y.S. *Education during COVID-19*; IDEAS: Kuala Lumpur, Malaysia, 2020; pp. 3–9.
35. Rahmawati, R.; Rosita, R.; Asbari, M. The Role and Challenges of Islamic Religious Education in the Age of Globalization. *J. Inf. Syst. Manag. (JISMA)* **2022**, *1*, 6–11.
36. Azzahra, S.; Maryanti, R.; Wulandary, V. Problems Faced by Elementary School Students in the Online Learning Process during the COVID-19 Pandemic. *Indones. J. Multidiscip. Res.* **2022**, *2*, 245–256. Available online: [https://www.researchgate.net/profile/Verra-Wulandary/publication/355159336\\_Problems\\_Faced\\_by\\_Elementary\\_School\\_Students\\_in\\_the\\_Online\\_Learning\\_Process\\_during\\_the\\_COVID-19\\_Pandemic/links/6160df611eb5da761e674682/Problems-Faced-by-Elementary-School-Students](https://www.researchgate.net/profile/Verra-Wulandary/publication/355159336_Problems_Faced_by_Elementary_School_Students_in_the_Online_Learning_Process_during_the_COVID-19_Pandemic/links/6160df611eb5da761e674682/Problems-Faced-by-Elementary-School-Students) (accessed on 24 May 2022).
37. Giorgio-Doherty, K.; Baniahmadi, M.; Newton, J.; Olson, A.M.; Ferguson, K.; Sammons, K.; Wood, M.M.; Drake, C. COVID and Curriculum: Elementary Teachers Report on the Challenges of Teaching and Learning Mathematics Remotely. *J. Multicult. Aff.* **2021**, *6*, 3.
38. Engzell, P.; Frey, A.; Verhagen, M.D. Learning loss due to school closures during the COVID-19 pandemic. *Proc. Natl. Acad. Sci. USA* **2021**, *118*, e2022376118. [CrossRef] [PubMed]
39. Manyeredzi, T.; Mpofo, V. Smartphones as digital instructional interface devices: The teacher's perspective. *Res. Learn. Technol.* **2022**, *30*, 1–9. [CrossRef]
40. Istenič, A. Shifting to digital during COVID-19: Are teachers empowered to give voice to students? *Educ. Technol. Res. Dev.* **2021**, *69*, 43–46. [CrossRef] [PubMed]
41. Ferraro, F.V.; Ambra, F.I.; Aruta, L.; Iavarone, M.L. Distance learning in the COVID-19 era: Perceptions in Southern Italy. *Educ. Sci.* **2020**, *10*, 355. [CrossRef]
42. Atenas, J.; Havemann, L.; Timmermann, C. Critical literacies for a datafied society: Academic development and curriculum design in higher education. *Res. Learn. Technol.* **2020**, *28*, 1–14. [CrossRef]
43. Simanjuntak, M.B.; Suseno, M.; Setiadi, S.; Lustyantie, N.; Barus, I.R.G.R.G. Integration of Curricula (Curriculum 2013 and Cambridge Curriculum for Junior High School Level in Three Subjects) in Pandemic Situation. *Ideas J. Pendidik. Sos. Dan Budaya* **2022**, *8*, 77. [CrossRef]
44. Luo, Y.; Yee, K.K. Research on Online Education Curriculum Resources Sharing Based on 5G and Internet of Things. *J. Sens.* **2022**, *2022*, 9675342. [CrossRef]
45. Rajagopal, K.; Firssova, O.; de Beeck, I.O.; Van der Stappen, E.; Stoyanov, S.; Henderikx, P.; Buchem, I. Learner skills in open virtual mobility. *Res. Learn. Technol.* **2020**, *28*, 1–18. [CrossRef]
46. Aslan, S.A.; Turgut, Y.E.; Aslan, A. Teachers' views related the middle school curriculum for distance education during the COVID-19 pandemic. *Educ. Inf. Technol.* **2021**, *26*, 7381–7405. [CrossRef]
47. König, J.; Jäger-Biela, D.J.; Glutsch, N. Adapting to online teaching during COVID-19 school closure: Teacher education and teacher competence effects among early career teachers in Germany. *Eur. J. Teach. Educ.* **2020**, *43*, 608–622. [CrossRef]
48. Mohebi, S.; Parham, M.; Sharifirad, G.; Gharlipour, Z. Social Support and Self-Care Behavior Study. *J. Educ. Health Promot.* **2018**, *1*–6. [CrossRef]
49. Mbiydzennyuy, E.N. Teaching and Learning in resource-limited settings in the face of the COVID-19 pandemic. *J. Educ. Technol. Online Learn.* **2020**, *3*, 211–223. [CrossRef]
50. Alsub Clare, M.A. Teacher Involvement in Curriculum Development. *J. Educ. Pract.* **2016**, *7*, 106–107.
51. Thomas, M.S.C.; Rogers, C. Education, the science of learning, and the COVID-19 crisis. *Prospects* **2020**, *49*, 87–90. [CrossRef] [PubMed]
52. Huber, S.G.; Helm, C. COVID-19 and schooling: Evaluation, assessment and accountability in times of crises—Reacting quickly to explore key issues for policy, practice and research with the school barometer. *Educ. Assess. Eval. Account.* **2020**, *32*, 237–270. [CrossRef]
53. Burke, J.; Dempsey, M. COVID-19 Practice in Primary Schools in Ireland Report. *Maynooth Univ.* **2020**, 1–275. [CrossRef]
54. Lockee, B.B. Online education in the post-COVID era. *Nat. Electron.* **2021**, *4*, 5–6. [CrossRef]
55. Judson, E. How Teachers Integrate Technology and Their Beliefs About Learning: Is There a Connection? *J. Technol. Teach. Educ.* **2006**, *14*, 581–597.

56. Razaf, Y.; Symbolon, E.; Stevanus, H.; Wahyuni, D. Pengaruh Pembelajaran Daring Selama Masa Pandemi COVID-19 Terhadap Tingkat Stres Akademik Belitung. *J. Signal* **2020**, *8*, 203–214.
57. Taylor, K. 13,000 School Districts, 13,000 Approaches to Teaching During COVID. *New York Times*, 21 January 2021.
58. Abdurrahmansyah, A. Learning Loss Dan Gagalnya Fungsi Sekolah Di Masa Pandemi. *SRIWIJAYA POST*. 2021, 2-2. 2021. Available online: <http://repository.radenfatah.ac.id/20914/> (accessed on 24 May 2022).
59. Aji, R.H.S. Dampak COVID-19 pada Pendidikan di Indonesia: Sekolah, Keterampilan, dan Proses Pembelajaran. *SALAM J. Sos. Dan Budaya Syar-i* **2020**, *7*. [[CrossRef](#)]
60. Agustini, N.L.P.R.E. Character Education for Children in Indonesia. *J. Educ. Study* **2021**, *1*, 89–94. [[CrossRef](#)]
61. Panda, D.S. Online teaching and learning process in COVID-19 Pandemic: Current Trends and Issues. *Int. J. Engl. Lit. Soc. Sci.* **2021**, *6*, 262–265. [[CrossRef](#)]
62. Snelling, J.; Fingal, D. 10 strategies for online learning during a coronavirus outbreak. *ISTE. Areas Focus*. 2020. Available online: <https://www.iste.org/explore/learning-during-covid-19/10-strategies-online-learning-during-coronavirus-outbreak> (accessed on 24 May 2022).
63. Lawrence, K.C.; Fakuade, O.V. Parental involvement, learning participation and online learning commitment of adolescent learners during the COVID-19 lockdown. *Res. Learn. Technol.* **2021**, *29*, 1–16. [[CrossRef](#)]
64. Arora, A.K.; Srinivasan, R. Impact of pandemic COVID-19 on the teaching—Learning process: A study of higher education teachers. *Prabandhan Indian J. Manag.* **2020**, *13*, 43–56. [[CrossRef](#)]
65. Daheri, M.; Juliana, J.; Deriwanto, D.; Amda, A.D. Efektifitas WhatsApp sebagai Media Belajar Daring. *J. Basicedu* **2020**, *4*, 775–783. [[CrossRef](#)]
66. Zubaidah, N. Pembelajaran Jarak Jauh Beri Dampak Emosi Negatif pada Siswa. (Online). Available online: <https://www.okezone.com/tren/read/2021/08/12/620/2454497/pembelajaran-jarak-jauh-beri-dampak-emosi-negatif-pada-siswa> (accessed on 28 August 2021).
67. Adi, P.W.; Martono, T.; Sudarno, S. Learning Failures and Barriers in Schools During a Pandemic at Indonesia: A Literature Review. *Duconomics Sci-Meet (Educ. Econ. Sci. Meet)* **2021**, *1*, 160–165. [[CrossRef](#)]
68. Ahmad, A.R.; Murad, H.R. The impact of social media on panic during the COVID-19 pandemic in iraqi kurdistan: Online questionnaire study. *J. Med. Internet Res.* **2020**, *22*, e19556. [[CrossRef](#)]
69. Dentith, A.M.; Flinders, D.; Lupinacci, J.; Thom, J.S. *Curriculum, Environment, and the Work of CA Bowers: Ecological and Cultural Perspectives*; Routledge: London, UK, 2021.