

# Nidhomul Haq

Jurnal Manajemen Pendidikan Islam

E : ISSN : 2503-1481

[Archives](#) [Current](#) [Editorial Team](#) [Reviewers](#) [Announcements](#) [About](#)

[Contact](#) [Ikhac Journals](#)

[Home](#) / [About the Journal](#)

**Nidhomul Haq** is a journal of management of Islamic education research and article. It is published by Department of Islamic Education Management Institut Pesantren KH Abdul Chalim Pacet Mojokerto. Management and Islamic education are specific topics. **Nidhomul Haq: Journal of Islamic Education Management:** The journal promotes research and scholarly discussion concerning Islamic Education Management in Academic disciplines and Institutions, focusing on the advancement of scholarship in both formal and non-formal education. Topics might be about Islamic educational management studies in madrasah (Islamic schools), *pesantren* (Islamic boarding schools), and Islamic education in university.

Nidhomul Haq : Jurnal Manajemen Pendidikan Islam

S3 H-INDEX : 19  
H5-INDEX : 19

| Year | S3 Index |
|------|----------|
| 2018 | 0        |
| 2019 | 4        |
| 2020 | 3        |
| 2021 | 3        |
| 2022 | 3        |
| 2023 | 3        |

last update : 2022-09-22 powered by [sinta.kemdikbud.go.id](http://sinta.kemdikbud.go.id)

INTERNATIONAL  
STANDARD  
SERIAL  
NUMBER  
INTERNATIONAL CENTRE

## JOURNAL DETAIL

# Nidhomul Haq

## Jurnal Manajemen Pendidikan Islam

E : ISSN : 2503-1481

[Archives](#) [Current](#) [Editorial Team](#) [Reviewers](#) [Announcements](#) [About](#)[Contact](#) [Ikhac Journals](#)[Home](#) / [Editorial Team](#)

### Editor in Chief:

- [Akhmad Sirojuddin](#), Scopus ID ([57879583400](#)) Institut Pesantren KH Abdul Chalim Mojokerto, Indonesia

### Managing Editors:

- [Muhammad Anas Ma`arif](#), Scopus ID ([57879106800](#)) Institut Pesantren KH Abdul Chalim Mojokerto, Indonesia

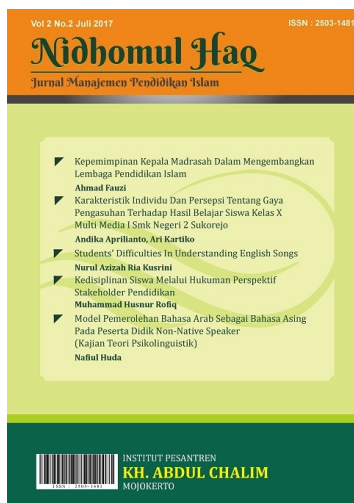
### Associate Editor:

- [Hasan Baharun](#), (Scopus ID : [57200983602](#)), Nurul Jadid University, Paiton, Probolinggo, **Indonesia**.
- [Juhji](#), (Scopus Id [57215436330](#): ) UIN Sultan Maulana Hasanuddin Banten, **Indonesia**
- [Samsul Susilawati](#), Scopus Id. ([57216203214](#)) Universitas Islam Negeri Malik Ibrahim Malang, **Indonesia**
- [Aslan](#), Scopus ID: 57216361977, Institut Agama Islam Sultan Muhammad Syafiuddin Sambas, Kalimantan **Indonesia**
- [Moh Wardi](#), (Scopus Id [57215574095](#)) Institut Dirosat Islamiyah Al-Amien Preduan Sumenep, **Indonesia**
- [Muhammad Fahmi Hidayatullah](#) (Scopus Id: [57554747300](#)), Universitas Islam Malang, **Indonesia**

### International Editorial Board:

- [Miriam D Ezzani](#), Scopus Id ([37661168700](#)), Texas Christian University, **United States**
- [Terence Lovat](#), (Scopus Id: [6506388151](#)) University of Newcastle **Australia**
- [Kamarul Azmi Jasmi](#), [Scopus ID](#), 56263553200, Faculty of Social Sciences and Humanities Universiti Teknologi **Malaysia**
- [Gamal Mustafa](#), Professor Foundations of Education, Al-Imam Mohammad Ibn Saud Islamic University and, Al-Azhar University **Egypt**

[Home](#) / [Archives](#) / Vol 6 No 3 (2021): Islamic Education Management



This issue has been available online since 30th **November 2021** for the regular issue of November **2021**. All articles in this issue (16 **original research articles**) were authored/co-authored by 54 **authors** from 24 Institutions.

**DOI:** <https://doi.org/10.31538/ndh.v6i3>

**Published:** 2021-11-30

## Articles

### [The Effect of The Supervision of The Principal and The Professional Competency of Teachers on Teacher Performance in Private MI in Pacet District](#)

Ahmad Karim, Ari Kartiko, Dicky Edwar Daulay, Ika Dewi Kumalasari  
497-512



### **Visionary Leadership of The Head of Diniyah Madrasah in Improving The Quality Santri**

Muhammad Amin Fathih, Triyo Supriyatno, Muhammad Amin Nur

513-525



PDF

### **Prospects of Digital Literature and Its Implications on Increasing Learning Outcomes During The Covid-19 Pandemic**

Samsul Susilawati

526-536



PDF

### **The Management of Tahfidz Al-Qur'an Learning at Homeschooling Public Learning Center**

Raudhah Saragih, Mesiono Mesiono, Inom Nasution

537-547



PDF

### **Implementation Of Group Guidance Program Management in Improving Cooperation Learning**

Abdurrahman Abdurrahman, Yusuf Hadijaya, Muhammad Latif Sipahutar

548-558



PDF

### **Implementation of Guidance and Counseling Service Management**

Lahmuddin Lubis, Yusuf Hadijaya, Sri Wardani

559-569



PDF

### **Implementation of Teacher Career Development in Madrasah Aliyah Negeri**

Syafaruddin Syafaruddin, Eka Susanti, Wirda Hasana

570-578



PDF

### **The Implementation of Human Resource Management in Improving the Quality of Teacher's Learning**

Subaidi Subaidi, Sudarmaji Sudarmaji, Moh Nasuka, Munasir Munasir

579-586



PDF

### **Merger of Private Universities: Empirical Study STAI Become FAI of Muhammadiyah University Bandung**

Sitti Chadidjah, Muhamad Tisna Nugraha, Qiqi Yulianti Zaqiah, Supiana Supiana  
587-598

 PDF

### **PAUD Teacher Strategies in Supporting Learning in The Covid-19 Pandemic Period**

Fortina Verawati Sianturi  
599-607

 PDF

### **Issues and Management of Islamic Education in a Global Context**

Husna Amin, Gairah Sinulingga, Desy Desy, Erjati Abas, Sukarno Sukarno  
608-620

 PDF

### **Learning Multimedia Management Strategy at Home During Learning from Home**

Budi Sulistiyo Nugroho, Abdul Wahab Syakhrani, Alim Hardiansyah, Petrus Jacob Pattiasina, Emy Yunita Rahma Pratiwi  
621-631

 PDF

### **Charismatic Leadership Based on Student Friendly Learning Approach**

A. Ishaq Fauzi Al-Fauzany, Engkus Kuswarno, Ikka Kartika AF, Uyun Supyan Sauri  
632-647

 PDF

### **Management of Learning for Children with Special Needs an Early Age**

Lilis Suwandari, Sutaryat Trisnamansyah, Hanafiah Hanafiah, Achmad Mudrikah  
648-659

 PDF

### **Humanistic Approach in Supervision and Evaluation of Islamic Religious Education**

Yanti Nurdiyanti Nurdiyanti, Zainal Arifin, Wawan Ridwan, Dodo Suhada, Mohamad Erihadiana  
660-671

 PDF

### **The Role of The School Committee on Infrastructure Management at Public Alementary School**

Murni Yanto  
672-682

## Learning Multimedia Management Strategy at Home During Learning from Home

### Budi Sulistiyo Nugroho

Politeknik Energi dan Mineral Akamigas (PEM Akamigas), Cepu, Kab. Blora, Indonesia

### Abdul Wahab Syakhrani

STAI RAKHA AMUNTAI Kalimantan Selatan, Indonesia

### Alim Hardiansyah

Institut Sains dan Teknologi Al Kamal, Indonesia

### Petrus Jacob Pattiasina

Universitas Pattimura, Indonesia

### Emy Yunita Rahma Pratiwi

Universitas Hasyim Asy'ari Jombang, Indonesia

**DOI:** <https://doi.org/10.31538/ndh.v6i3.1806>

**Keywords:** Learning Multimedia, Management, Strategy, Learning from Home

### Abstract

The extraordinary development of technology followed by changes in human life in all fields also impacts the behavior of technology users and consumer behavior than multimedia, all of which have accelerated changes both in terms of multimedia transformation and in the form of business models that use multimedia. This study will discuss how multimedia strategies and their sustainable governance will impact distance learning that has been practiced so far as part of the effort to respond, namely learning from home. Because the impact of this media is quite significant, the parties, including parents who have to guide their children's learning, must also get a good

# Learning Multimedia Management Strategy at Home During Learning from Home

Budi Sulistiyo Nugroho<sup>1)</sup>, Abdul Wahab Syakhrani<sup>2)</sup>, Alim Hardiansyah<sup>3)</sup> Petrus Jacob Pattiasina<sup>4)</sup> Emy Yunita Rahma Pratiwi<sup>5)</sup>

<sup>1)</sup> Politeknik Energi dan Mineral Akamigas (PEM Akamigas), Cepu, Kab. Blora, Indonesia

<sup>2)</sup> STAI RAKHA AMUNTAI Kalimantan Selatan, Indonesia

<sup>3)</sup> Institut Sains dan Teknologi Al Kamal, Indonesia

<sup>4)</sup> Universitas Pattimura, Indonesia

<sup>5)</sup> Universitas Hasyim Asy'ari Jombang, Indonesia

e-mail: [nbudi.nugroho@gmail.com](mailto:nbudi.nugroho@gmail.com)

Received: 11-09-2021

Revised: 30-11-2021

Accepted: 12-12-2021

---

## Info Artikel

## Abstract

### Keywords:

Learning Multimedia, Management, Strategy, Learning from Home.

The extraordinary development of technology followed by changes in human life in all fields also impacts the behavior of technology users and consumer behavior than multimedia, all of which have accelerated changes both in terms of multimedia transformation and in the form of business models that use multimedia. This study will discuss how multimedia strategies and their sustainable governance will impact distance learning that has been practiced so far as part of the effort to respond, namely learning from home. Because the impact of this media is quite significant, the parties, including parents who have to guide their children's learning, must also get a good understanding of how their strategy is to manage multimedia management for their children's learning considering that today multimedia technology has become like food that must be adequately served, really not contaminated with viruses or other toxins. This study utilizes data from the latest findings from previous publications from the book, journals, and other websites that contribute to the voice of technology and its impact on its users. Based on the results of the study of these data sources and a very detailed discussion, we finally got a new entry where parents must gain an understanding of multimedia applications and also how to use them and their uses so that parents and students can take advantage of multimedia for their learning success and life.

### Kata kunci:

Multimedia, Manajemen, Strategi, Belajar dari Rumah.

### Abstrak

*Perkembangan teknologi yang luar biasa diikuti dengan perubahan kehidupan manusia di segala bidang juga berdampak pada perilaku pengguna teknologi dan perilaku konsumen selain multimedia, yang semuanya mempercepat perubahan baik dari segi transformasi multimedia maupun dalam bentuk model bisnis yang menggunakan multimedia. Studi ini akan membahas bagaimana strategi multimedia dan tata kelolanya yang berkelanjutan akan berdampak pada pembelajaran jarak jauh yang telah dipraktikkan selama ini sebagai bagian dari upaya untuk merespon, yaitu belajar dari rumah. Karena dampak dari media ini cukup signifikan, maka para pihak termasuk orang tua yang harus membimbing belajar anaknya juga harus memahami dengan baik bagaimana strategi mereka dalam mengelola manajemen multimedia untuk pembelajaran anaknya mengingat saat ini teknologi multimedia sudah menjadi seperti makanan yang harus disajikan secukupnya, benar-benar tidak terkontaminasi virus atau racun lainnya. Studi ini memanfaatkan data dari temuan terbaru dari publikasi sebelumnya dari buku, jurnal, dan situs web lain yang berkontribusi pada suara teknologi dan dampaknya bagi*

---

*penggunanya. Berdasarkan hasil kajian dari sumber data tersebut dan pembahasan yang sangat detail, akhirnya kami mendapatkan masukan baru dimana orang tua harus mendapatkan pemahaman tentang aplikasi multimedia dan juga cara penggunaan dan kegunaannya agar orang tua dan siswa dapat memanfaatkannya, multimedia untuk keberhasilan belajar dan kehidupan mereka.*

---

## **INTRODUCTION**

Multimedia governance is a challenging task because, for example, the firm must search for data that allows the data to be accessed and large data formats that will be useful for multimedia users (Bhatt & Kankanhalli, 2011; Putra & Aslan, 2020). So various studies must be conducted to understand how multimedia governance is good for business, work, and educational and teaching research that uses multimedia in normal conditions, especially during crises (Rapanta et al., 2020). This was very unexpected when the world hit COVID-19, hitting the world including Indonesia, where all government, business, and education activities stopped instantly; the solution shown was based on the recommendations of the United Nations, in this case, UNESCO to deal with education problems (Djalante et al., 2020; Putra et al., 2020; Aslan et al., 2020; Manullang et al., 2021). World institutions propose and require that education be managed remotely with the help of technology or multimedia learning according to their respective abilities (Huang et al., 2020).

Talking about distance education then means talking about how multimedia can assist effective learning. So, in this case, the task of the multimedia manager is to try to understand the usefulness of the function of how to work and everything related to multimedia governance for learning from home (Kpolovie & Lale, 2017; Sudarmo et al., 2021). When it comes to learning at home, one of the most challenging things was learning from home, and we understand together that not all parents understand multimedia (Pinter, 2017). So here, there is a dependence on media managers in schools from certain institutions to assist so that families, especially parents of students, just as much as possible understand and be able to apply the basics of multimedia that will help student learning during learning at home (Rose, 2020). Understanding starts from how to manage finances to be able to get multimedia services effectively and efficiently.

Another problem is how this multimedia can become a learning center for community learning. It means that the community of students, parents, and teachers must establish a link that connects one computer to another. So this is a basic understanding that multimedia is a network of simultaneously interconnected work (Lieberman & Pointer Mace, 2010; Putra, Mizani, et al., 2020). In this case, not all parents can get support from users and multimedia specialists. They know in this case, it is for home learning to be successful, so here is where professionals are needed to assist parents so that they understand how to use technology simply (Churiyah et al., 2020).

Indeed, speaking of multimedia here, it is required to have less self-reliance on technology systems because this is a prerequisite without any particular understanding, for example, how we understand domain-specific metadata files (Hjørland, 2008). How to use the control system on the use of multimedia and how to deal with the problem of the data usage domain are essential skills, how to critique metadata so that everyone can use it (Nyeem et al., 2013). As for pictorial cases in nature, scientific ones, this also needs support from parents. The school institution should help parents understand how to manage quality multimedia (Senge et al., 2012). Then the data that can be adequately controlled and there are all open services are



limited, so the system often does this multimedia service leads to specialists' rules. So that the story is scientific in nature and high quality can be understood well so that multimedia becomes a work format that is always from analog to digital, all of these are ways of using bandwidth that really must be transferred and controlled with various supports on the internet parents of students (Powell et al., 2010).

Ideally, every school should have multimedia specialists who are willing to get help so that the school does not blame the way children use multimedia when learning is based on distance (Rottinghaus, 2012). For example, how access can be achieved, how children can find the things they are looking for, then particular things, and that is something that must be provided by multimedia administrators so that parents understand a little and can use it practically and straightforwardly (Shanafelt et al., 2020). In the world of multimedia governance, this is an outstanding career where multimedia governance must be supported by adequate human resources (Bryson, 2018). Those who have special knowledge and education in technology will later be a coordinator of multimedia production. Then there is one to understand as a production manager. Then some help in the field of a website browser, the journalist section who will record videos, take photos, and all kinds of other functions (Briggs, 2013).

Furthermore, some functions are like digital broadcast reporters. So here, multimedia administrators have to have specialist areas to do it themselves (Wallace, 2013). Some things can be given to other people, for example, technical problems that are writing activities, then how can this multimedia writer know the essential things to know when managing multimedia (Perez & Cremedas, 2014). There is a marketing section or a promo section; any relevant lesson content is given. The ease and no part of bloggers and happy news is also a position to be done (Lieb, 2012). For example, being a manager in the marketing department, there are also some public relations and many multimedia things that are growing day by day (Keller, 2010). This is where at least parents should understand how multimedia is used at home to help students during learning disruptions at school and open online classes from home (C. J. Wang et al., 2020).

## **METHODS**

First, we repeat that this study aims to understand multimedia management and strategies for learning from home. Immediately after understanding the problem of this situation, we then conducted an electronic search for supporting data in several databases of journal publications, proceeding books, and databases of multimedia websites and learning from home (Maxwell, 2012). The next activity is a study by analyzing the data findings through a coding system for critical data evaluation, in-depth interpretation, and extracting digests which we believe are valid in answering each question of this study (Roller & Lavrakas, 2015). After a process of analysis and in-depth study under a phenomenological approach, we can finally conclude that this study is a critical study to be understood by school leadership teachers and parents, and students. From implementation to reporting, we chose a descriptive qualitative research design in which we tried to gain an in-depth understanding of every phenomenon related to multimedia and the latest technology that supports distance learning during the pandemic (Lewis, 2015). In designing the reporting format, we followed several qualitative reviews of publications and literature reviews carried out by previous exports to get enough models and guidelines (Pathak et al., 2013).

## **RESULTS AND DISCUSSION**

### **Understanding multimedia in learning**

Based on a review of several related documents on organizing multimedia management for learning to find a home. The results of our study found, among other things, that based on the results of the analysis that learning during this pandemic is closely related to the use of adequate multimedia so that the learning process as much as possible can be assisted by multimedia or digital media where the class has been closed, it will be replaced with online classes or online learning (Mehta et al., 2020). So, here, the first understanding is that learning during this pandemic is loaded with understanding technology in applications and the ability to run the application to carry out the learning determined by the curriculum even during the covid-19 pandemic (Zydney & Warner, 2016; Aslan, 2019; Aslan & Wahyudin, 2020). So after analyzing the needs needed to support learning during the pandemic, the next step is how parents try to work together with teachers and students so that for the first time before studying learning content, of course, parents and students must have the ability to use and apply this multimedia. So, it provides benefits in terms of learning (Mulenga & Marbán, 2020).

This understanding of the ability to operate multimedia is reasonable because the subjects served from investments and schools are all using multimedia (Chao et al., 2020). Therefore, multimedia management is essential to understand and understand how to use it both by parents, teachers, and students themselves (Bryant, 2010). Moreover, students who are still in their lower school classes are very dependent on the support and assistance of their parents, for example, in dealing with audio problems, how to handle videos about text images and how to enable interaction between the school teachers and also how to design animations so that this is truly a multimedia realm that is indeed simple but allows for more learning (DeVoss & Eidman-Aadahl, 2010).

### **Multimedia and students in a millennial time**

It must be admitted that today's students are millennials who are already more familiar with multimedia, especially those related to the world of young people (Hashim, 2018). However, in terms of multimedia in learning, we believe that they are also more enthusiastic than their parents because, since the conflict with learning disorders caused by Covid-19, students are indeed getting used to the world of technology where they have been exposed a lot to the use of technology (Holland & Piper, 2016). However, as far as possible, how this multimedia can be arranged and studied again to give birth to new creativity oriented to how to make student learning successful (DiLullo et al., 2011).

How they understand the topic of learning then how they can produce the topic in the form of media, students can design, and the stages in evaluating success (Esteves et al., 2017). This is all part of the task of students, teachers, and parents on how they design learning. The good thing is how they can make digital illustrations of their study documents. How they do photo activities, how they do audio editing tasks and many other things that are the ability to design websites, how to make animated cartoons, so this learning does not seem monotonous but becomes something that attracts the attention of all learning participants (Vaid et al., 2021).

As the author observed when implementing online learning, the government's policy response efforts left some worries and problems where most teachers have not been able to apply and adapt themselves as teachers ready to support learning with multimedia. This is one of the issues that must be helped so that online learning conditions do not stop so that learning

during the pandemic does not worsen. This multimedia and governance issue is a problem that requires joint attention, so teachers must be able to help students with the use of multimedia tools even at a basic level (Reimers et al., 2020). For example, when designing a project-based learning activity with multimedia, if the teachers are still confused, it is feared that students at home will find it even more difficult. Even though this is an opportunity for teachers to demonstrate their ability to help students who study at home, it is challenging for teachers to immediately overcome the difficulties and obstacles faced by students (Pal et al., 2020).

Furthermore, the problem is even more significant when learning occurs, but many students still do not have the slightest knowledge about online learning governance (Al-Balas et al., 2020). Not to mention that there are still many students constrained by internet access, including equipment procurement. However, here we will try to discuss the nature of governance and how the existing elephant instruments can be optimized as quickly as possible and overcome all the challenges (Hamid et al., 2020). So that at least students' learning tasks during the period can be directly enabled, even with all the disturbing problems, but at least parents can help students (Pandey et al., 2021).

Another big problem is that when learning occurs, there are still many students who do not have the slightest knowledge readiness about the use of multimedia learning, and not to mention there are still many students who are constrained by internet access and including the procurement of technology devices (Al-Balas et al., 2020). However, here we will try to discuss the nature of governance, how existing technological instruments can be optimized as much as possible and can overcome all the challenges that exist so that at least students' learning tasks during difficult times can be carried out adequately. So, it can happen even with all the annoying problems. However, teachers and parents can help students be active in multimedia learning (Sudarsana et al., 2018).

Indeed, in this case, through the Ministry of Education, the government should have some reference or manual that must be conveyed to teachers and parents about multimedia management. However, this is one thing that is impossible because the corona outbreak itself happened suddenly and not only happened to students but was a collective problem internationally (Ali, 2020). So it requires wisdom and intelligence on how the leadership of each country and school teachers to adapt and transfer knowledge as much as possible to students so that they can organize with simple principles so that online or online learning problems can achieve good results wherever possible (Woolf, 2010).

This is one of the crises that will impact the other where the health crisis with the pandemic turns out to impact the drop in business and education (Iglesias-Pradas et al., 2021). In particular, is student learning with this multimedia, so this is a perfect opportunity to allow teachers to understand knowledge in learning, how the ability for education supported by this technology is multimedia management as well as teachers who have to be updated to be able to overcome their problems (Dawes, 2012). Several steps can be taken when talking about the character of teachers in terms of multimedia in making learning successful under challenging times, such as hitting the world of education (Ahied et al., 2020).

The first step is to design training and capacity building for teachers in dealing with multimedia. Moreover, in this case, the word multimedia is something related to technology in education, so teachers will not overcome current problems (Reis et al., 2010). In terms of teaching, if the potential and abilities of teachers are not optimized according to the needs of the field they face. The conditions described above are classic problems in which countries are still

developing (Colliot & Jamet, 2018). Many potential teachers must be developed with various orientations and maximum training so that multimedia problems among teachers can be addressed as soon as possible. This is also a big problem if we want to solve problems from the root (Chen, 2020).

So the government cannot expect teachers to cope on their own because this requires responsibility and the dedication and professionalism of the teachers (Hargreaves & Fullan, 2015). We know that not all teachers can overcome their problems because not all teachers have a single perception of motivation and dedication to solve problems and work to achieve goals following the position and substance of the education they want (Guan et al., 2018). So the ideal step to take is to improve the quality of teachers in terms of handling and training techniques as well as training for the preparation of students, namely students must also be equipped with the ability to use computer basics or multimedia learning so that learning at this time will be helped and also do not forget the briefing to parents and guardians of students (Malik & Agarwal, 2012).

### **Benefits of multimedia in education**

Multimedia is associated with the ability to present data in text, sound, animation, images, audio, and programs that make the learning experience more impressive and unforgettable, from a bona fide perspective to deep learning (T. juang Wang, 2010). A deep understanding of multimedia in a learning environment is very bona fide, where the relationship between what is provided by multimedia and its relation to the student's brain (Li & Jeong, 2020). In terms of how the impression of multimedia gives new nuances to the development of students' brains, both as the development of verbal abilities and visual development (Scheibe & Rogow, 2011) from the content displayed by multimedia was essential. Thus, understanding the content presented through this multimedia will support transferring lesson content from the source and automatically be readily accepted by the student's brain because this multimedia can impress with exciting content (Scheibe & Rogow, 2011). Moreover, increase the level of thinking and how learning problems can be solved with these existing skills in terms of multimedia in deep learning (Alismail & McGuire, 2015).

Another advantage is with multimedia, where teachers and students together look for learning content. So far, using this book is very slow. However, with the intelligence of this technology, it can provide fast, easy, and light access to processing. From the existing raw materials of information and data with multimedia capabilities, it becomes desired because the working power of technology is different. With manual labor by humans, in other words, multimedia allows information and communication to occur so quickly and measurably structured and well planned (Liukkonen & Tsai, 2016).

Moreover, the last part is how multimedia becomes an explorer rather than the rest of the world, whatever the star, so this multimedia can make it seem as if these students and teachers can explore a world that is so big, but with technology, everything becomes instant (Gilakjani, 2012). A little more to add with this multimedia learning will immediately have an immediate impact on the growth of a student's learning where the impact will be different from the way traditional learning methods work (Clark & Mayer, 2016). Thus, there can be no doubt that this technology is a profitable business both for business managers and its impact on consumers, namely consumers of education, and can also criticize informal learning that is genuinely conducive and fertile for student learning (Murakami-Ramalho et al., 2013). So that it is not in vain to use this media in learning that is being hit by crises, both natural disaster crises

and crises such as what happened in the plague disaster that is being experienced by the world today (Shafi et al., 2020).

## **CONCLUSION**

This section can conclude the points from the initial part of data collection, analysis, and concluding. We repeat the purpose of this paper is to get a deep understanding of the development of multimedia in learning, especially to respond to the learning period from home in helping students, teachers, and parents so that learning during a crisis can be a solution with an understanding of multimedia. To answer this core problem, we have conducted an in-depth study and interpretation of every evidence of previous findings, and we believe that the presentation of our results has answered the question of this study as much as possible; what about the evidence that we presented with accurate data from 10 years ago. As for the critical points that are the conclusions of this paper, based on the study and discussion, we conclude that, among others, we have gained an understanding of multimedia for learning specifically, namely distance learning at home; these findings have been supported by other findings in the context of multimedia-based learning efforts, for learning solutions disrupted by a global pandemic.

In the explanation above, we process Kanya through understanding the problem first so that we can interpret any data findings relating to the understanding of technology, especially multimedia learning and solutions to educational problems with all the advantages of multimedia such as presenting audio-visual text and other animations and this is very relevant to learning for students who are categorized as millennials who are not far from their lives with the most advanced technological infrastructure. The next point is that we state that multimedia and sued on are inseparable; in other words, the millennial generation will be more productive and innovative when they are offered learning aids, namely multimedia, especially when the world is being hit by the covid disaster where the government implements socialization policies and closes all education and investment but continuing to learn online, here the presence of multimedia is a very innovative solution, productive and with better results.

Then in the last section, we describe some of the benefits of multimedia in education. At the end of this chapter, it is appropriate that we present the advantages of multimedia in its application at a time when education is being disrupted by a pandemic so that both teachers, parents, and students have alternative learning that has been proven effective and innovative in learning in the millennial century.

## REFERENCES

- Ahied, M., Muharrami, L. K., Fikriyah, A., & Rosidi, I. (2020). Improving Students' Scientific Literacy Through Distance Learning With Augmented Reality-Based Multimedia Amid The Covid-19 Pandemic. *Jurnal Pendidikan IPA Indonesia*, 9(4), 499–511.
- Al-Balas, M., Al-Balas, H. I., Jaber, H. M., Obeidat, K., Al-Balas, H., Aborajoo, E. A., Al-Taher, R., & Al-Balas, B. (2020). Distance learning in clinical medical education amid COVID-19 pandemic in Jordan: Current situation, challenges, and perspectives. *BMC Medical Education*, 20(1), 1–7.
- Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*, 10(3), 16–25.
- Alismail, H. A., & McGuire, P. (2015). 21st century standards and curriculum: Current research and practice. *Journal of Education and Practice*, 6(6), 150–154.
- Aslan, A. (2019). *HIDDEN CURRICULUM*. Pena Indis.
- Aslan, A., Silvia, S., Nugroho, B. S., Ramli, M., & Rusiadi, R. (2020). TEACHER'S Leadership Teaching Strategy Supporting Student Learning During The Covid-19 Disruption. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 5(3), 321–333. <https://doi.org/10.31538/ndh.v5i3.984>
- Aslan & Wahyudin. (2020). *Kurikulum dalam Tantangan Perubahan*. Bookies Indonesia. <https://scholar.google.com/scholar?oi=bibs&hl=en&cluster=17745790780728460138>
- Bhatt, C. A., & Kankanhalli, M. S. (2011). Multimedia data mining: State of the art and challenges. *Multimedia Tools and Applications*, 51(1), 35–76.
- Briggs, M. (2013). *Journalism next: A practical guide to digital reporting and publishing*. CQ Press.
- Bryant, J. A. (2010). Children and the Media: A Service-Learning Approach. *Integrating Service-Learning Into the University Classroom*, 53.
- Bryson, J. M. (2018). *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement*. John Wiley & Sons.
- Chao, M., Xue, D., Liu, T., Yang, H., & Hall, B. J. (2020). Media use and acute psychological outcomes during COVID-19 outbreak in China. *Journal of Anxiety Disorders*, 74, 102248.
- Chen, Y. (2020). Optimization of Music Teaching Methods Based on Multimedia Computer-aided Technology [J]. *Computer-Aided Design and Applications*, 47–57.
- Churiyah, M., Sholikhah, S., Filianti, F., & Sakdiyyah, D. A. (2020). Indonesia education readiness conducting distance learning in Covid-19 pandemic situation. *International Journal of Multicultural and Multireligious Understanding*, 7(6), 491–507.
- Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & sons.
- Colliot, T., & Jamet, E. (2018). Understanding the effects of a teacher video on learning from a multimedia document: An eye-tracking study. *Educational Technology Research and Development*, 66(6), 1415–1433.
- Dawes, L. (2012). What stops teachers using new technology? In *Issues in teaching using ICT* (pp. 61–80). Routledge.
- DeVoss, D. N., & Eidman-Aadahl, E. (2010). *Because digital writing matters: Improving student writing in online and multimedia environments*. John Wiley & Sons.
- DiLullo, C., McGee, P., & Kriebel, R. M. (2011). Demystifying the Millennial student: A reassessment in measures of character and engagement in professional education. *Anatomical Sciences Education*, 4(4), 214–226.
- Djalante, R., Lassa, J., Setiamarga, D., Sudjatma, A., Indrawan, M., Haryanto, B., Mahfud, C., Sinapoy, M. S., Djalante, S., & Rafliana, I. (2020). Review and analysis of current responses to COVID-19 in Indonesia: Period of January to March 2020. *Progress in Disaster Science*, 6, 100091.

- Esteves, M., Pereira, A., Veiga, N., Vasco, R., & Veiga, A. (2017). The use of new learning technologies in higher education classroom: A case study. *International Conference on Interactive Collaborative Learning*, 499–506.
- Gilakjani, A. P. (2012). A study on the impact of using multimedia to improve the quality of English language teaching. *Journal of Language Teaching & Research*, 3(6).
- Guan, N., Song, J., & Li, D. (2018). On the advantages of computer multimedia-aided English teaching. *Procedia Computer Science*, 131, 727–732.
- Hamid, R., SENTRYO, I., & HASAN, S. (2020). Online learning and its problems in the Covid-19 emergency period. *Jurnal Prima Edukasia*, 8(1), 86–95.
- Hargreaves, A., & Fullan, M. (2015). *Professional capital: Transforming teaching in every school*. Teachers College Press.
- Hashim, H. (2018). Application of technology in the digital era education. *International Journal of Research in Counseling and Education*, 2(1), 1–5.
- Hjørland, B. (2008). What is knowledge organization (KO)? *KO Knowledge Organization*, 35(2–3), 86–101.
- Holland, D. D., & Piper, R. T. (2016). A technology integration education (tie) model for millennial preservice teachers: Exploring the canonical correlation relationships among attitudes, subjective norms, perceived behavioral controls, motivation, and technological, pedagogical, and content knowledge (TPACK) competencies. *Journal of Research on Technology in Education*, 48(3), 212–226.
- Huang, R. H., Liu, D. J., Tlili, A., Yang, J. F., & Wang, H. H. (2020). Handbook on facilitating flexible learning during educational disruption: The Chinese experience in maintaining uninterrupted learning in COVID-19 outbreak. *Beijing: Smart Learning Institute of Beijing Normal University*, 1–54.
- Iglesias-Pradas, S., Hernández-García, Á., Chaparro-Peláez, J., & Prieto, J. L. (2021). Emergency remote teaching and students' academic performance in higher education during the COVID-19 pandemic: A case study. *Computers in Human Behavior*, 119, 106713.
- juang Wang, T. (2010). Educational benefits of multimedia skills training. *TechTrends*, 54(1), 47–57.
- Keller, K. L. (2010). Brand equity management in a multichannel, multimedia retail environment. *Journal of Interactive Marketing*, 24(2), 58–70.
- Kpolovie, P. J., & Lale, N. E. S. (2017). Globalization and adaptation of university curriculum with LMSs in the changing world. *European Journal of Computer Science and Information Technology*, 5(2), 28–89.
- Lewis, S. (2015). Qualitative inquiry and research design: Choosing among five approaches. *Health Promotion Practice*, 16(4), 473–475.
- Li, P., & Jeong, H. (2020). The social brain of language: Grounding second language learning in social interaction. *Npj Science of Learning*, 5(1), 1–9.
- Lieb, R. (2012). *Content marketing: Think like a publisher—how to use content to market online and in social media*. Que Publishing.
- Lieberman, A., & Pointer Mace, D. (2010). Making practice public: Teacher learning in the 21st century. *Journal of Teacher Education*, 61(1–2), 77–88.
- Liukkonen, M., & Tsai, T.-N. (2016). Toward decentralized intelligence in manufacturing: Recent trends in automatic identification of things. *The International Journal of Advanced Manufacturing Technology*, 87(9), 2509–2531.
- Malik, S., & Agarwal, A. (2012). Use of multimedia as a new educational technology tool-A study. *International Journal of Information and Education Technology*, 2(5), 468.
- Manullang, S. O., Mardani, M., & Aslan, A. (2021). The Effectiveness of Al-Quran Memorization Methods for Millennials Santri During Covid-19 in Indonesia. *Nazhbruna: Jurnal Pendidikan Islam*, 4(2), 195–207. <https://doi.org/10.31538/nzh.v4i2.1334>
- Maxwell, J. A. (2012). *Qualitative research design: An interactive approach*. Sage publications.

- Mehta, M., Julaiti, J., Griffin, P., & Kumara, S. (2020). Early stage machine learning-based prediction of US county vulnerability to the COVID-19 pandemic: Machine learning approach. *JMIR Public Health and Surveillance*, 6(3), e19446.
- Mulenga, E. M., & Marbán, J. M. (2020). Is COVID-19 the gateway for digital learning in mathematics education? *Contemporary Educational Technology*, 12(2), ep269.
- Murakami-Ramalho, E., Militello, M., & Piert, J. (2013). A view from within: How doctoral students in educational administration develop research knowledge and identity. *Studies in Higher Education*, 38(2), 256–271.
- Nyeem, H., Boles, W., & Boyd, C. (2013). A review of medical image watermarking requirements for teleradiology. *Journal of Digital Imaging*, 26(2), 326–343.
- Pal, D., Vanijja, V., & Patra, S. (2020). Online Learning During COVID-19: Students' Perception of Multimedia Quality. *Proceedings of the 11th International Conference on Advances in Information Technology*, 1–6.
- Pandey, D., Ogunmola, G. A., Enbeyle, W., Abdullahi, M., Pandey, B. K., & Pramanik, S. (2021). COVID-19: A framework for effective delivering of online classes during lockdown. *Human Arenas*, 1–15.
- Pathak, V., Jena, B., & Kalra, S. (2013). Qualitative research. *Perspectives in Clinical Research*, 4(3).
- Perez, S., & Cremedas, M. (2014). The multimedia journalist in large-market television newsrooms: Can old dogs learn new tricks? Do they want to? *Electronic News*, 8(3), 159–176.
- Pinter, A. (2017). *Teaching young language learners*. Oxford University Press.
- Powell, A., Bryne, A., & Dailey, D. (2010). The essential Internet: Digital exclusion in low-income American communities. *Policy & Internet*, 2(2), 161–192.
- Putra, P. & Aslan. (2020). Pengembangan Bahan Ajar Berbasis Imtaq Dan Iptek Di Era Revolusi Industri 4.0 Pada Mata Pelajaran Sains Madrasah Ibtidaiyah. *Ta'Limuna: Jurnal Pendidikan Islam*, 9(1), 1–15. <https://doi.org/10.32478/talimuna.v9i1.345>
- Putra, P., Liriwati, F. Y., Tahrim, T., Syafrudin, S., & Aslan, A. (2020). The Students Learning from Home Experiences during Covid-19 School Closures Policy In Indonesia. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 5(2), 30–42. <https://doi.org/10.25217/ji.v5i2.1019>
- Putra, P., Mizani, H., Basir, A., Muflihin, A., & Aslan, A. (2020). The Relevancy on Education Release Revolution 4.0 in Islamic Basic Education Perspective in Indonesia (An Analysis Study of Paulo Freire's Thought). *Test Engineering & Management*, 83, 10256–10263.
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 2(3), 923–945.
- Reimers, F., Schleicher, A., Saavedra, J., & Tuominen, S. (2020). Supporting the continuation of teaching and learning during the COVID-19 Pandemic. *Oecd*, 1(1), 1–38.
- Reis, M., Cabral, L., Peres, E., Bessa, M., Valente, A., Morais, R., Soares, S., Baptista, J., & Aires, A. (2010). Using information technology based exercises in primary mathematics teaching of children with cerebral palsy and mental retardation: A case study. *Turkish Online Journal of Educational Technology-TOJET*, 9(3), 106–118.
- Roller, M. R., & Lavrakas, P. J. (2015). *Applied qualitative research design: A total quality framework approach*. Guilford Publications.
- Rose, S. (2020). Medical student education in the time of COVID-19. *Jama*, 323(21), 2131–2132.
- Rottinghaus, D. E. (2012). *Career opportunities in multimedia: A needs assessment*.
- Scheibe, C., & Rogow, F. (2011). *The teacher's guide to media literacy: Critical thinking in a multimedia world*. Corwin Press.
- Senge, P. M., Cambron-McCabe, N., Lucas, T., Smith, B., & Dutton, J. (2012). *Schools that learn (updated and revised): A fifth discipline fieldbook for educators, parents, and everyone who cares about education*. Currency.



- Shafi, M., Liu, J., & Ren, W. (2020). Impact of COVID-19 pandemic on micro, small, and medium-sized Enterprises operating in Pakistan. *Research in Globalization*, 2, 100018.
- Shanafelt, T., Ripp, J., & Trockel, M. (2020). Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. *Jama*, 323(21), 2133–2134.
- SUDARMO, Nugraha, M. S., MARDHIAH, R. Iliow, F. E., & ASLAN. (2021). 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(2), 1950–1956. <https://doi.org/10.47750/cibg.2021.27.02.205>
- Sudarsana, I. K., Renawati, P. W., Nerta, I. W., Widana, I. K. A., Saddhono, K., & Napitupulu, D. (2018). The Effectiveness Of Multimedia Training For Elementary School Teachers In Karangasem, Bali. *Journal of Physics: Conference Series*, 1114(1), 012032.
- Vaid, A., Jaladanki, S. K., Xu, J., Teng, S., Kumar, A., Lee, S., Somani, S., Paranjpe, I., De Freitas, J. K., & Wanyan, T. (2021). Federated learning of electronic health records to improve mortality prediction in hospitalized patients with COVID-19: Machine learning approach. *JMIR Medical Informatics*, 9(1), e24207.
- Wallace, S. (2013). The complexities of convergence: Multiskilled journalists working in BBC regional multimedia newsrooms. *International Communication Gazette*, 75(1), 99–117.
- Wang, C. J., Ng, C. Y., & Brook, R. H. (2020). Response to COVID-19 in Taiwan: Big data analytics, new technology, and proactive testing. *Jama*, 323(14), 1341–1342.
- Woolf, B. P. (2010). *Building intelligent interactive tutors: Student-centered strategies for revolutionizing e-learning*. Morgan Kaufmann.
- Zydney, J. M., & Warner, Z. (2016). Mobile apps for science learning: Review of research. *Computers & Education*, 94, 1–17.