



MADRASAH HEAD LEADERSHIP STRATEGY IN DEVELOPING THE LEARNING PROCESS IN THE ERA OF DISRUPTION

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Abstract

The research aims to identify the leadership model of madrasah heads in formulating learning policies and then to analyze implementation in developing learning processes in the era of disruption. This research design is multisite, using a qualitative approach. The focus of this research was carried out at MA Al-Mukhlisin Blega and SMA Ash-Shahihyah Blega, Bangkalan Regency, East Java. Then the participants from the total number of informants were 14 informants, including school and madrasa principals, curriculum heads, Islamic teachers, and students. The findings of the discussion in this article are obtained. First, there are differences in the leadership style models of the two schools. Where there is a democratic leadership spirit, and the implementation of management is bottom-up. Then, the leader's authoritarian, paternalistic attitude or top-down management. Second, there are two learning models: blended and hybrid. The educational staff uses applications such as (Google Classroom, Kahoot, Microsoft

Teams, LMS Canvas, Quora, and Lectora). Thus, this article provides a deeper understanding of the leadership model of madrasas and school principals in formulating learning policies in the era of disruption so that it can be used as a reference in developing adaptive educational strategies. In addition, analysis of policy implementation provides a real picture of the effectiveness of learning practices in the field, which contributes to improving the quality of education and strengthening the madrasa management system in an era of technological change.

Keywords: *Madrasa Head Leadership, Adaptive Strategy, Era of Disruption, 21st-Century Learning.*

1. Introduction

Learning in the disruption era has become urgent because rapid technological changes require the education system to be more adaptive and innovative. The entire learning process must integrate digital technology, such as e-learning platforms, to support accessibility and efficiency in student learning.¹ Additionally, a focus on developing 21st-century skills, such as critical thinking, digital literacy, and collaboration, is essential for students to be ready to face global challenges. The disruption era also encourages applying flexible and personalized learning methods to meet individual needs.² In this context, leaders who can contribute to the agenda concept of achieving quality education are needed. On the other hand, as a madrasah leader, you must present an adaptive and innovative vision in facing the challenges of the times.³ Considering that the era of disruption brings great opportunities to create more effective and relevant learning, it also requires careful management of change to utilize technology, such as digital platforms and social media, to improve access and quality of learning.⁴ Thus, the learning process can become a transformation tool that is relevant, inclusive, and in line with the demands of the times.

The phenomenon that often occurs in the era of disruption can be seen that policy makers such as madrasah heads and teachers face various problems in developing the learning process.⁵ One of the main challenges is the need for more competence in digital literacy and the lack of synergy between madrasah heads and teachers in designing

¹ Aslan Aslan et al., "Teacher's Leadership Teaching Strategy Supporting Student Learning During The Covid-19 Disruption," *Nidbomul Haq: Jurnal Manajemen Pendidikan Islam* 5, no. 3 (November 21, 2020): 321–33, <https://doi.org/10.31538/ndh.v5i3.984>.

² Carolina Aldao et al., "Modelling the Crisis Management and Impacts of 21st Century Disruptive Events in Tourism: The Case of the COVID-19 Pandemic," *Tourism Review* 76, no. 4 (July 27, 2021): 929–41, <https://doi.org/10.1108/TR-07-2020-0297>.

³ Warman Warman et al., "Leadership Style and Principal Supervision in Improving Teacher Performance at State High Schools in Kutai Kartanegara Regency, East Kalimantan Province, Indonesia," *EduLine: Journal of Education and Learning Innovation* 2, no. 1 (October 30, 2021): 17–24, <https://doi.org/10.35877/454RI.eduline581>.

⁴ Mohsen Attaran, "Digital Technology Enablers and Their Implications for Supply Chain Management," *Supply Chain Forum: An International Journal* 21, no. 3 (July 2, 2020): 158–72, <https://doi.org/10.1080/16258312.2020.1751568>.

⁵ Agus Kurnia et al., "The Phenomenon of School Dropouts in the Pujut, Mandalika SEZ: An Interpretive Phenomenological Analysis from the Perspective of Education Actors and Society," *International Journal of Sociology of Religion* 2, no. 2 (October 28, 2024): 425–42, <https://doi.org/10.70687/ijsr.v1i1.36>.

innovative strategies due to the lack of collaboration and a clear vision.⁶ The problem between some educators who have not fully mastered technology make it difficult to utilize digital platforms optimally to support learning. This impacts the lack of innovation in learning methods that should be more adaptive and relevant to student needs.⁷ In addition, resistance to change is also an obstacle. Some teachers may feel comfortable with conventional methods and are reluctant to try new approaches, such as project-based learning or digital technology. Today's students need an interactive learning experience centered on developing 21st-century skills.⁸ Furthermore, other facts also often occur, such as limited infrastructure, especially in madrasahs located in remote areas. Limited access to the internet and digital devices hinders the implementation of technology-based learning.⁹

Several previous research trends on the leadership strategy of madrasah heads and teachers' efforts in developing the learning process in the era of disruption show three main trends. First, a study highlights the importance of the ability of madrasah heads to adopt digital technology.¹⁰ A leader is expected to be a key driver in integrating technology into the learning process to create innovative and relevant learning experiences.^{11;12} Second, a study that emphasizes the role of collaboration between madrasah heads and teachers.¹³ Where a leader must provide support and active involvement in teacher empowerment can improve the quality of learning, especially in simultaneously facing global and local challenges.^{14;15} Third, focusing on developing 21st-century skills is a recurring theme. The study underscores that the role of leaders should encourage teachers to teach digital literacy, critical thinking, and collaboration on change

⁶ Rohmani Nur Indah et al., "The Research Competence, Critical Thinking Skills and Digital Literacy of Indonesian EFL Students," *Journal of Language Teaching and Research* 13, no. 2 (March 1, 2022): 315–24, <https://doi.org/10.17507/jltr.1302.11>.

⁷ Athanasios Christopoulos and Pieter Sprangers, "Integration of Educational Technology during the Covid-19 Pandemic: An Analysis of Teacher and Student Receptions," ed. Shuyan Wang, *Cogent Education* 8, no. 1 (January 1, 2021): 1–17, <https://doi.org/10.1080/2331186X.2021.1964690>.

⁸ Edgar Ceh-Varela, Carlos Canto-Bonilla, and Dhimitraq Duni, "Application of Project-Based Learning to a Software Engineering Course in a Hybrid Class Environment," *Information and Software Technology* 158 (June 2023): 107189, <https://doi.org/10.1016/j.infsof.2023.107189>.

⁹ Adison Adrianus Sihombing and Maifalinda Fatra, "Distance Learning During the Pandemic Era: Online Learning Experiences of State Madrasah Tsanawiyah Students During Covid-19 in Indonesia," *Analisa: Journal of Social Science and Religion* 6, no. 01 (July 30, 2021): 95–112, <https://doi.org/10.18784/analisa.v6i01.1235>.

¹⁰ Yusuf Hanafi et al., "The New Identity of Indonesian Islamic Boarding Schools in the 'New Normal': The Education Leadership Response to COVID-19," *Heliyon* 7, no. 3 (March 2021): e06549, <https://doi.org/10.1016/j.heliyon.2021.e06549>.

¹¹ Elizabeth Landa et al., "Leader Support and the Integration of Innovative Teaching–Learning Technologies: The Mediating Role of Technological Level of Knowledge," *Education and Information Technologies* 28, no. 12 (December 29, 2023): 15523–41, <https://doi.org/10.1007/s10639-023-11776-8>.

¹² Tasneem Fatima and Afshan Masood, "Impact of Digital Leadership on Open Innovation: A Moderating Serial Mediation Model," *Journal of Knowledge Management* 28, no. 1 (January 5, 2024): 161–80, <https://doi.org/10.1108/JKM-11-2022-0872>.

¹³ Jepri Husin, "The Strategy of School Heads in Improving the Discipline of Education Manpower in Madrasah," *Britain International of Humanities and Social Sciences (BIOHS) Journal* 2, no. 3 (October 16, 2020): 643–48, <https://doi.org/10.33258/biohs.v2i3.314>.

¹⁴ Joshua W. Reid et al., "Empowering Teacher Leaders: The Role of Research in Changing Teacher Leaders' Sense of Themselves as Professionals," *International Journal of Leadership in Education*, March 11, 2022, 1–44, <https://doi.org/10.1080/13603124.2022.2045629>.

¹⁵ Bethlyn Vergo Houlihan et al., "Trauma-Informed Leadership in Quality Improvement: What We Learned From Practicing in a Pandemic," *Pediatrics* 153, no. Supplement 1 (January 1, 2024), <https://doi.org/10.1542/peds.2023-063424G>.

to ensure the sustainability of innovation in learning.^{16;17} The entire article shows its uniqueness by highlighting the collaboration between the leadership of madrasah heads and teachers in learning during and after the pandemic in the era of disruption. However, this study offers a new perspective by filling the conceptual gap from previous studies, especially the madrasah and school leadership model, to formulate policies and how to implement the learning process in the era of disruption. Therefore, this article is highly expected to obtain new findings that make a significant contribution, both in Indonesia and around the world, to encourage the sustainability of future research agendas in developing quality education.

This study focuses on two main aspects in the context of madrasah heads' leadership in the disruption era. First, to explore and understand the leadership model of madrasah heads in formulating adaptive and relevant learning policies in the era of disruption. Second, this study aims to analyze the implementation of the policy in developing the learning process in the era of disruption. The focus of this research was carried out at Ash-Shahihyah Blega High School and MA Al-Mukhlisin Blega, Bangkalan Regency, East Java. This research is expected to contribute to the development of Islamic educational leadership, provide recommendations for improving learning policies, and improve the quality of education in madrasahs and madrasahs so that they can compete and be relevant amid the challenges of the disruption era.

2. Literature Review

a. Leadership of Madrasah Heads

Leadership is a process in which a person leads, guides, influences, or controls the thoughts, feelings, or behaviors of others to achieve certain goals. Leadership behavior must carry out a strong leadership function, and there are times when leadership is permissive or soft.¹⁸ Meanwhile, effective crisis leadership depends on how to think, make decisions, make meaning, and learn.¹⁹ In the context of the leadership of the head of the madrasah is the ability of a madrasah head to manage, direct, and motivate all elements in the madrasah environment to achieve educational goals. The contribution of this leader includes a strategic role in formulating the vision and mission, developing the curriculum, improving the quality of learning, and creating a positive and religious school culture.²⁰ In Islamic education, this leadership also includes forming students' character based on Islamic values. In addition, the head of the madrasah is responsible for empowering teachers and staff, ensuring the implementation of educational

¹⁶ Diego Varas et al., "Teachers' Strategies and Challenges in Teaching 21st Century Skills: Little Common Understanding," *Thinking Skills and Creativity* 48 (June 2023): 101289, <https://doi.org/10.1016/j.tsc.2023.101289>.

¹⁷ Juliene Madureira Ferreira, Kateryna Zabolotna, and Samin Lee, "Teaching Twenty-First-Century Skills: Examining Collaborative Learning in Initial Teacher Education in Finnish Universities," *Scandinavian Journal of Educational Research*, October 23, 2024, 1–22, <https://doi.org/10.1080/00313831.2024.2419078>.

¹⁸ Mark C. Crowley, *Lead From the Heart: Transformational Leadership For the 21st Century* (Hay House, 2020), 19–20.

¹⁹ Kristina Buhagiar and Amitabh Anand, "Synergistic Triad of Crisis Management: Leadership, Knowledge Management and Organizational Learning," *International Journal of Organizational Analysis* 31, no. 2 (January 31, 2023): 412–29, <https://doi.org/10.1108/IJOA-03-2021-2672>.

²⁰ Muhammad Ridho Fatkhul Humam, MulyaPutra, Mahbub Humaidi Aziz, Bima Fandi Asy'arie, "Transformative Leadership of School Principals in Improving the Quality of Education from an Islamic Perspective," *AL-FAHIM: Jurnal Manajemen Pendidikan Islam* 6, no. 4 (2024): 343–268, <https://doi.org/https://doi.org/10.54396/alfahim.v6i2.1457>.

programs runs effectively, and maintaining good relations with the surrounding community.²¹

Based on the type of institution, leadership can be divided into two categories: formal and non-formal. Meanwhile, from the orientation, there are three types of leadership: leadership that focuses on tasks, focuses on working relationships, and is oriented towards achieving effective results.²² A leader who is defined as a servant places serving leadership as the ability to motivate oneself to serve the people he leads. This type of leadership focuses on empowering and developing an individual's potential through attention and direction. In addition, the role of servant leadership still has weaknesses because the instrument is unclear, and its application in the leadership model has yet to be fully implemented.²³ The ministry leadership model involves eleven indicators of calling, listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, growth, and community building.²⁴ One strategy that leaders can apply is to focus on developing perception and trust through transactional and transformational leadership styles to achieve leadership effectiveness.²⁵

b. Learning in the Era of Disruption

Learning is an interactive process between teachers and students to improve knowledge, skills, and attitudes. It involves various methods, approaches, and technologies that support students in acquiring a deep understanding to prepare them for academic and social challenges.²⁶ In the context of learning in the era of disruption, it refers to the teaching and learning process that has undergone significant changes due to technological advances and rapid social changes.²⁷ This era of disruption presents various innovations that affect how learning is carried out, including using digital technology, e-learning platforms, and online learning resources. Where in the learning process of this era not only focuses on teaching in the classroom but includes flexible, open, and accessible learning anytime and anywhere.²⁸ In addition, the main goal of learning in the era of disruption is to prepare students with 21st-century skills, such as critical thinking, creativity, collaboration, and digital literacy.²⁹

²¹ Dian Dian et al., "The Role of Kiai Leadership in Developing Students' Character at Islamic Boarding School," *AL-ISHLAH: Jurnal Pendidikan* 16, no. 1 (March 1, 2024): 234–46, <https://doi.org/10.35445/alishlah.v16i1.4378>.

²² M. Fahim, *Kepemimpinan Pendidikan Islam* (Malang: CV Dream Litera Buana, 2016), 17.

²³ Kartini Kartono, *Pemimpin Dan Kepemimpinan* (Jakarta: Raja Grafindo Persada, 2008), 28.

²⁴ John E. Barbuto and Daniel W. Wheeler, "Scale Development and Construct Clarification of Servant Leadership," *Group & Organization Management* 31, no. 3 (June 1, 2006): 300–326, <https://doi.org/10.1177/1059601106287091>.

²⁵ Wen Juan Cai, Mark Loon, and Peter Hoi Kin Wong, "Leadership, Trust in Management and Acceptance of Change in Hong Kong's Civil Service Bureau," *Journal of Organizational Change Management* 31, no. 5 (September 12, 2018): 1054–70, <https://doi.org/10.1108/JOCM-10-2016-0215>.

²⁶ Muhammad Mujtaba Asad et al., "Integration of E-Learning Technologies for Interactive Teaching and Learning Process: An Empirical Study on Higher Education Institutes of Pakistan," *Journal of Applied Research in Higher Education* 13, no. 3 (June 7, 2021): 649–63, <https://doi.org/10.1108/JARHE-04-2020-0103>.

²⁷ Gabriella Oliveira et al., "An Exploratory Study on the Emergency Remote Education Experience of Higher Education Students and Teachers during the COVID-19 Pandemic," *British Journal of Educational Technology* 52, no. 4 (July 18, 2021): 1357–76, <https://doi.org/10.1111/bjet.13112>.

²⁸ Richard Watermeyer, Tom Crick, and Cathryn Knight, "Digital Disruption in the Time of COVID-19: Learning Technologists' Accounts of Institutional Barriers to Online Learning, Teaching and Assessment in UK Universities," *International Journal for Academic Development* 27, no. 2 (April 3, 2022): 148–62, <https://doi.org/10.1080/1360144X.2021.1990064>.

²⁹ Samuel Kai Wah Chu et al., *21st Century Skills Development Through Inquiry-Based Learning* (Singapore: Springer Singapore, 2017), 33, <https://doi.org/10.1007/978-981-10-2481-8>.

Using technology, learning can be tailored to students' needs and interests, providing a more personalized and relevant learning experience in an ever-evolving world.³⁰ The benefits of learning in the era of disruption are very broad, including increasing access to education for all groups, accelerating the learning process, and encouraging better development of student competencies.³¹ There are two models of the post-pandemic learning system, especially in the era of disruption. First, the online model that existed before the pandemic, but has developed rapidly over time. Learning using multimedia aims to increase students' understanding of the material taught. Second, the blended learning model is a learning approach that combines face-to-face (conventional) methods with online learning. In this model, some teaching is done directly in the classroom, while others are carried out virtually through digital platforms.³² Thus, learning in the disruption era enriches knowledge and prepares students to face future challenges with better preparedness.

3. Research Method

This research is field research, where the type used is multisite using a qualitative approach. The main goal of multisite studies is to identify similar patterns or develop new propositions and theories based on findings from various information from the field's research object.³³ This research was conducted at MA Al-Mukhlisin Blega and SMA Ash-Shahihyah Blega, Bangkalan Regency, East Java, Indonesia. The primary data obtained in this study were from observations, interviews, and documentation through madrasah heads, curriculum heads, Islamic religious teachers, and students. Meanwhile, secondary data is acquired from various literature, scientific articles, books, and proceedings that discuss collaboration between madrasah heads and teachers in learning in the era of disruption.

Then, this research was carried out for 14 months, from April 2023 to February 2024. The main data in this study was obtained through interviews, which were conducted twice. The participants' focus from all informants was 14 informants (2 principals and madrasahs, two curriculum heads, 4 Islamic teachers, and five students). This is done to find out the application carried out during the preparation of the Islamic religious learning process in the two educational institutions. The selection of each informant is based on their understanding of their credibility related to the achievement of missions and masses to develop quality Islamic education. On the same day, the researcher conducted a separate interview with the informant; this lasted for approximately 1-2 hours, and each informant was allowed to express his opinion. Not only that, the researcher also made observations in the environment at SMA Ash-Shahihyah Blega and MAS Al-Mukhlisin Blega, which were carried out both during the learning process in the classroom, outside the classroom and student activities at schools

³⁰ Agung Heru Setiadi et al., "Design of Heyzine Flipbook Based Arabic E-Module as an Alternative Teaching Material for Basic's Level," *An Nabighoh* 26, no. 2 (October 18, 2024): 195–216, <https://doi.org/10.32332/an-nabighoh.v26i2.195-216>.

³¹ Bima Fandi Asy'arie, Rachmad Arif Ma'ruf, and Anharul Ulum, "Analisis Pendidikan Agama Islam Dan Pendidikan Akhlak Perspektif Al-Ghazali," *Al-Qalam: Jurnal Kajian Islam Dan Pendidikan* 15, no. 2 (December 9, 2023): 155–66, <https://doi.org/10.47435/al-qalam.v15i2.2279>.

³² Zaeni et al. Akhmad, *Independent Curriculum in Learning in Madrasah* (Pekalongan: PT. Nasya Expanding Management, 2023), 160.

³³ La Ode Hasiara, *Penelitian Multi Kasus Dan Multi Situs* (Malang: CV. IRDH, 2018).

and madrasahs as well as corroborating data findings with documents at the two educational institutions by the study of the research topic.

Then, this study uses a data analysis model.³⁴ There are three stages in data analysis of this model, namely data reduction, data presentation, and conclusion drawn. First, data reduction. This stage is a reduction as a selection process, focusing on simplifying and transforming coarse data from written records in the field. The data reduction in this study was carried out after obtaining observation and interview data. Second, presentation data. This process is carried out at the stage of presenting data from the acquisition of observations and interviews with research informants through research resource persons with conclusions drawn. Third, conclude. This last stage is by writing a brief conclusion from the review of field records to be used as an answer received by the research topic related to the strategy of madrasah and school heads in preparing for learning after the post-pandemic.

4. Finding and Discussion

Finding

a. Leadership Model in Formulating Learning Policies in the Era of Disruption

First, planning the learning process at MA Al-Mukhlisin is carried out by adjusting conditions and increasing the capacity and ability of the school organization. Madrasah heads are actively following the development of online learning models as the basis for policy-making. In addition, the head of the madrasah also coordinates with teachers and staff to find solutions to every problem that arises. The following is the explanation of the head of the madrasah regarding this.

“Planning to develop the post-pandemic learning process in the era of disruption is the responsibility of madrasah heads. All teachers and staff at the school are also involved in every decision-making, especially facing the post-pandemic training process which has undergone many changes.” (Madrasa Head, Interview, 2023).

So far, the head of the madrasah has often highlighted environmental management, both inside and outside the madrasah. The environment is very important because it will determine whether or not the planning of programs that the madrasah has set will run. As conveyed by the curriculum representative, the following arguments were presented.

“Learning is a process of interaction between students and their learning resources in a managed environment to achieve certain goals that have been set. So, learning development is the first to be seen from improving the quality of teachers first, because we as teachers are one of the keys to the success of the optimal learning process.” (Head of Curriculum, Interview, 2023).

Madrasa management is intended to improve management; in this case, planning is related to the outbreak in the era of disruption, which significantly impacts changes in the learning system. As a leader, the head of the madrasah regularly holds coordination meetings to ensure the implementation of each program that has been planned. In addition, training programs need to be improved, especially related to changes in learning models in the era of disruption. As stated by the Islamic religion teacher.

“The head of our madrasah is very democratic in leading and always pays attention to every input from his subordinates. He always strives to improve the quality of learning, and all tasks carried out are by procedures, especially in learning. To deal with this problem, the head of the madrasah

³⁴ Matthew B Miles, A Michael Huberman, and Johnny Saldana, *Qualitative Data Analysis: A Methods Sourcebook* (SAGE Publications (Third edition), 2014), 33.

actively coordinates with various stakeholders to find the right solution. If problems arise in teaching, he first holds a meeting to complete the best solution.” (Islamic Religion Teacher, Interview, 2023).

In addition, the head of the madrasah is highly concerned about the students' condition. The head of the madrasah often comes to each class in his spare time to talk to students and provide motivation and encouragement to remain calm in pursuing knowledge. The following are the arguments submitted by the students.

“Our madrasah heads sometimes come into the classroom when they have free time to motivate us in learning. He always taught the meaning of education and the purpose of our schooling. Every Monday morning ceremony, he always conveys stories about the importance of education and our role as the nation's successor. He reminded us to remain enthusiastic about learning and not to give up easily, even though it is difficult to understand the lessons. He also emphasized the importance of learning to avoid juvenile delinquency and always diligent in worship and devotion to parents to become successful children, both in this world and in the hereafter.” (Student, Interview, 2023).

Second, the planning of the Principal of SMA As-Sahihyah in developing the learning process in the era of disruption reflects high responsibility. In principle, the management of learning development in the era of disruption is the same as education in general; it only needs to be adjusted to the existing situation. The following are the arguments of the principal.

“So far, planning for the development of the learning process in the era of disruption has been carried out by adjusting the existing situation to the current conditions. We continue to follow the development of the latest learning models through workshops and seminars organized by the government and online through various internet platforms. This is important to add insights that can be used in policy-making related to new learning models according to the situation and needs.” (Headmaster, Interview, 2023).

Preparing to develop the learning process in the era of disruption it only requires a little effort and money because schools already have various adequate supporting facilities, especially internet technology devices. The following explains the arguments of the deputy head of curriculum delivered.

“The preparation is not too much because it already has good IT facilities. Maybe increase the WIFI capacity so that it can cover all rooms in the school and is not hampered when used simultaneously.” (Head of Curriculum, Interview, 2023).

In the face of learning changes in the post-pandemic period, it is necessary to prepare suggestions and supporting infrastructure to carry out blended learning between online and offline. Some of the preparations for teachers and school employees are required to take part in training to develop their ability to operate internet technology, especially for learning with digital classes, such as (*Google Classroom, Kahoot, Microsoft Teams, LMS Canvas, Quora, and Lectora*). The following is what the Islamic teacher explained.

“The principal invited technology experts to explain various learning models that can be applied post-pandemic. In addition, direct training was also held to improve teachers' ability to use computers for learning purposes, with the full support of the principal. He always reminds us to carry out our duties well, come to work on time, and respect time. Our performance is assessed regularly, and if there is any negligence, we are called upon to provide explanations and receive directions to find solutions and provide positive feedback.” (Islamic Religion Teacher, Interview, 2023).

b. Implementation in Developing the Learning Process in the Era of Disruption

First, the head of the madrasah at MA Al-Muhlisin Blega emphasized improving the facilities and infrastructure to support online-based learning because the facilities in the madrasah are inadequate, in addition to the training programs for teachers to operate online-based learning models. The following are the arguments presented.

“In developing the learning process during the pandemic, it must first prepare supporting facilities and infrastructure, such as WIFI, laptops, and screen screens for online learning. Then, prepare the teacher because teachers are one of the keys to the success of the transformation process. To realize professional teachers so that they improve the competence and quality of teachers, there must be programs or training.” (Madrasa Head, Interview, 2023).

The head of the madrasah’s general contribution is responsible for the completeness of facilities and infrastructure related to handling the online learning model; he always controls because the facilities and infrastructure support the learning process. The solution implemented by school principals in facing the limitations of internet-based learning support facilities in the era of disruption is by applying a blended learning model, which is a learning model that combines online and offline by utilizing internet facilities, as the argument of the deputy head of curriculum put forward.

“Especially for the development of models during this pandemic, we are trying to arrange classrooms with a blended learning model, which is a learning model that combines online and offline. For example, reduction in the number of seats because classroom learning is limited to 25% of students. Offline or face-to-face learning in the classroom is still carried out as usual. Still, teachers always give assignments as work projects that can be carried out in groups by utilizing internet facilities at school and home.” (Head of Curriculum, Interview, 2023).



Figure 1. Blended learning activities

Teachers already know about education and learning, but online-based learning problems, they have not mastered well because it is relatively new and sudden. Although, in theory, they already know, they have never done it in practice. The following is what the Islamic teacher said.

“In general, teachers carry out their duties well, although some are less professional and less responsible, such as not being disciplined on time. The teachers here have also been able to prepare the lesson plan well because they always follow the development of the curriculum. In addition, some of the obstacles faced include the lack of supporting facilities for the online learning model, as well as the uneven ability of teachers to carry out internet-based learning. On the student side, some of them do not have digital devices such as mobile phones or laptops. However, this problem can still be solved by borrowing devices or applying a small study group model.” (Islamic Religion Teacher, Interview, 2023).

Regarding the preparations made in developing the learning process in the Era of Disruption, where the school does not spend too much energy and money because the school already has various supporting facilities, especially those related to Internet Technology devices. The following is the presentation of the school curriculum representative delivered.

“The preparation is not too much because it already has good IT facilities. Maybe increase the WIFI capacity so that it can cover all rooms in the school and is not hampered when used simultaneously. Teachers and school employees must attend training to develop their ability to operate internet technology, especially for learning. With digital classes, such as (Google Classroom, Kahoot, Microsoft Teams, LMS Canvas, Quora, and Lectora).” (Head of Curriculum, Interview, 2023).

Second, on developing the learning process in the era of disruption, the principal's strategy at SMA As-Ahahihyah is to implement a learning model that combines online and offline, known as hybrid learning. Although the existing supporting facilities are adequate, some modifications are still needed, especially in setting the schedule for implementing Hybrid Learning. The argument conveyed by the principal is as below.

“In developing the learning process in the post-pandemic period, it is by adopting mixed learning models between online and offline because, during the pandemic, students are used to offline learning models that have proven effective. In addition, learning using computer technology has become necessary, so it needs to be improved in the post-pandemic period so that students can easily adapt to the development of learning technology.” (Headmaster, Interview, 2024).

Meanwhile, the deputy head of curriculum highlighted the role and responsibility of school principals in ensuring the availability of learning support facilities. The principal continues to strive to obtain these resources through government assistance and independent procurement through foundations. The following explains the arguments of the deputy head of curriculum delivered.

“So far, the principal's contribution is very responsible for his duties, especially regarding the completeness of facilities and infrastructure that support the online learning model. The principal directly checks the suitability of facilities and infrastructure, such as replacing chairs or tables that are no longer suitable for use with new ones. To develop online facilities. Meanwhile, the collection of funds from students' parents was not carried out because the school had received school operational assistance (BOS). In addition, such as reducing the number of benches because learning in class is limited to 25% of students. Internet-based learning devices are also permanently installed in several rooms to make operating easy. Meanwhile, lighting, ventilation, and air temperature are still maximized.” (Head of Curriculum, Interview, 2024).

In addition to implementing learning planning documents, the principal supervises the classroom directly to ensure that the implementation of learning is by the goals to be achieved. Supervision also accommodates various complaints or obstacles found during learning, especially internet-based learning. Islamic religious teachers also recognize this as a means of improvement in learning activities. The following arguments are presented.

“Classroom supervision is carried out according to a predetermined schedule. Sometimes, I supervise every week because of the number of teachers and subjects, with the target that all teachers must get supervision in a year. The principal or deputy principal can supervise this with competence in the field. In addition, supervision in the classroom is also used to accommodate complaints and obstacles teachers face, especially related to internet-based learning.” (Islamic Religion Teacher, Interview, 2024).

In addition, students' responses to the learning development process in the disruption era show various views. Some students positively welcomed the implementation of online and hybrid learning because they felt more flexible in managing the time and location of learning. They also think that technology-based learning provides a new and more interactive experience. The following are the arguments put forward by the students.

“So far, some students have expressed difficulties related to limited access to devices and stable internet networks. In addition, some students feel less familiar with digital learning platforms and want further guidance. However, most students are still trying to adapt to this new learning model, hoping that the learning process will be more effective over time.” (Student, Interview, 2024)



Figure 2. Learning with a hybrid learning model

Researchers also made observations by looking directly at the classes used in hybrid learning. Three classes each can be used: grades 10, 11, and 12. There is also a special room that can be used for joint learning. Meanwhile, the students' responses were happy and enthusiastic to carry out learning with the hybrid model. They feel a new atmosphere and can-do various explorations using online media. (Observation, 2024)

As explained from the cross-site findings at MA AL-Mukhlisin and SMA As-Ahahihyah, there is no striking difference between top-down and bottom-up management in leadership. This means that both models are equally effective in learning development in disruption. The blended learning model is more flexible but often constrained by learning time, while the hybrid model is more rigid but more effective. The researcher presents the following in the table of research findings from the two schools.

Table 1. Cross-site analysis at As-Sahihyah High School and Al-Mukhlisin High School

No	Research Aspects	MA Al-Mukhlisin	SMA As-Shahihyah	Conclusion
1	Strategies for formulating learning development after the covid pandemic	Leadership is more democratic and the implementation of management is bottom-up	Leadership is more authoritarian, paternalistic or top-down management	In this case, there is no obvious difference between top-down and bottom-up management in leadership. This means that both models are equally effective in learning in the era of disruption.

2	Implementation of learning development after the covid pandemic	<ol style="list-style-type: none"> 1. Implementation of IT-based learning process 2. Using a blended learning model 3. Learning is synchronous and asynchronous 4. Asynchronous special flexible learning time 	<ol style="list-style-type: none"> 1. Implementation of IT-based learning process 2. Using a hybrid learning model 3. Learning is synchronous 4. Study time is set based on the schedule 	The blended learning model is more flexible but is often constrained by learning time. Meanwhile, the hybrid model is more rigid but more effective when learning.
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Discussion

Leadership Model in Formulating Learning Policies

First, the leadership model in MA Al-Mukhlisin in the era of disruption is more democratic, and management implementation is bottom-up. Madrasah leadership management that is democratic is a leadership style that prioritizes the active participation of all madrasah members in decision-making. The head of the madrasah in this model acts as a facilitator who encourages teachers, staff, students, and other stakeholders to convey ideas, opinions, and inputs. This approach creates a collaborative atmosphere where responsibilities are shared equally so that each individual feels valued in supporting the achievement of educational goals.³⁵ By involving many parties in the decision-making process, the resulting solutions tend to be more creative and diverse because they consider different perspectives with a harmonious work atmosphere. Through this model, it also encourages the development of teacher professionalism and strengthens the relationship between the madrasah and the community.³⁶ In addition, the main goal of democratic madrasah leadership is to create an inclusive, transparent, and innovative educational environment. This approach seeks to build a culture of cooperation, improve the quality of education, and produce a generation of students who have high values of togetherness and social responsibility.³⁷

Then, madrasah leadership management is bottom-up, a leadership approach that places initiatives and input from below, such as teachers, staff, students, or the community, as the main basis for decision-making.³⁸ In this model, the head of the madrasah functions as a supporter who listens, gathers, and facilitates ideas from all elements of the madrasah. This approach creates a participatory and democratic work atmosphere where individuals can contribute to the program's planning and implementation. Some of the benefits of bottom-up management include the creation

³⁵ Mulyasa Mulyasa, *Manajemen Dan Kepemimpinan Kepala Sekolah* (Jakarta: Bumi Aksara, 2011), 20.

³⁶ Kasful Anwar US Muhammad Said Ambiya, Ahmad Syukri, *Manajemen Kepala Madrasah (Upaya Peningkatan Budaya Kerja Guru)* (Yogyakarta: K-Media, 2021), 155.

³⁷ Farid Farid Ahmad, Daffa Zain Arkan, and Muhammad Addien, "Improving the Quality of Madrasah Ibtidaiyah Through Transformational Leadership," *EduBase: Journal of Basic Education* 5, no. 1 (March 31, 2024): 82–100, <https://doi.org/10.47453/edubase.v5i1.1997>.

³⁸ Muhammad Said Ambiya, Ahmad Syukri, *Manajemen Kepala Madrasah (Upaya Peningkatan Budaya Kerja Guru)*, 88.

of a high sense of belonging among all parties because they feel directly involved in the decision-making process.³⁹ In addition, this model allows for decision-making that is more relevant to the real needs in the field because ideas come from parties directly involved in the operation of the madrasah. As a bottom-up leader, this main goal is to create a madrasah environment that is inclusive, adaptive, and responsive to the needs of all parties. It supports creating an education system oriented towards improving the quality of educational services.⁴⁰

Second, the leadership model at SMA As-Sahihyah in the era of disruption is more authoritarian paternalistic or top-down management. The paternalistic, authoritarian school leadership model is a leadership style that emphasizes the leader's full control over decisions and policies while still paying special attention to the welfare of members.⁴¹ Second, the leadership model at SMA As-Sahihyah in the era of disruption is more authoritarian paternalistic or top-down management. The paternalistic, authoritarian school leadership model is a leadership style that emphasizes the leader's full control over decisions and policies while still paying special attention to the welfare of members.⁴² The benefits of this leadership model include the creation of high discipline in the school environment in decision-making and achieving targets in an organized manner. On the other hand, paternalistic, authoritarian leadership aims to create stability and efficiency in school management, ensure all parties follow the school's vision and mission, and build a controlled and structured educational environment. This model also aims to improve the quality of learning by ensuring that all elements of the madrasah are by the expectations that have been set.⁴³

Meanwhile, the attitude of a school principal leader who is top-down is a leadership style in which decisions, policies, and directions come from the head of the madrasah as the main authority. In this model, instructions are given hierarchically from the leadership to subordinates, such as deputy heads, teachers, and staff, who are in charge of implementing the decisions.⁴⁴ This model emphasizes central control with little room for subordinate participation in the decision-making process, thus creating an organized and clear organizational structure. The benefits of this approach are the creation of discipline, efficiency, and clarity in implementing school policies. With clear direction from the leadership, all elements of the school can focus on achieving the institution's goals in determining priorities.⁴⁵ In addition, the purpose of top-down leadership management is to ensure consistency in implementing the madrasah vision and mission

³⁹ Eka Putra, "The Effectiveness of Madrasah Head Leadership Management at MAN 1 Sungai Penuh," *At-Ta'lim: Media Informasi Pendidikan Islam* 22, no. 2 (December 20, 2023): 269–77, <https://doi.org/10.29300/attalim.v22i2.2548>.

⁴⁰ Bima Fandi Asy'arie et al., "Strengthening Learning Priorities in the 21st Century: Review of Islamic Education Policy in Indonesia," *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan* 10, no. 02 (November 25, 2024): 279–94, <https://doi.org/10.32678/tarbawi.v10i02.10615>.

⁴¹ Mulyasa, *Manajemen Dan Kepemimpinan Kepala Sekolah*, 47.

⁴² Muhammad Said Ambiya, Ahmad Syukri, *Manajemen Kepala Madrasah (Upaya Peningkatan Budaya Kerja Guru)*, 272.

⁴³ Korhan Arun et al., "Impact of Cultural Values on Leadership Roles and Paternalistic Style from the Role Theory Perspective," *World Journal of Entrepreneurship, Management and Sustainable Development* 17, no. 3 (March 30, 2021): 422–40, <https://doi.org/10.1108/WJEMSD-10-2020-0128>.

⁴⁴ Muhammad Said Ambiya, Ahmad Syukri, *Manajemen Kepala Madrasah (Upaya Peningkatan Budaya Kerja Guru)*, 89.

⁴⁵ Larry D. Shinn, "Top Down or Bottom Up? Leadership and Shared Governance on Campus," *Change: The Magazine of Higher Learning* 46, no. 4 (July 4, 2014): 52–55, <https://doi.org/10.1080/00091383.2014.925766>.

and create regularity in daily operations to optimize time and resources to build a stable and directed school environment, thereby supporting better quality education.⁴⁶

Implementation in Developing the Learning Process

First, during implementing learning at MA Al-Mukhlisin and SMA As-Sahihyah in the era of disruption, the two schools used information technology (IT). Technology is an integral part of the learning process in IT-based learning, from curriculum planning to student evaluation. Technology is used to create a more interactive and effective learning experience.⁴⁷ Some of the applications used include (1) Google Classroom, a web-based application for online learning. The app is designed to simplify the teaching and learning process, such as creating assignments, sharing materials, and organizing grades that can be used to improve collaboration and communication between teachers and students.⁴⁸ (2) Kahoot is a game-based interactive learning media that is easily accessible and user-friendly and can be used to develop quizzes such as pre-test or post-test activities or questions that students must solve.⁴⁹

Furthermore, (3) Microsoft Teams is an application that can be used for learning, both for distance learning and daily collaboration and communication between teachers and students as their learning medium.⁵⁰ (4) LMS Canvas is a learning management system (LMS) that connects teachers and students in online and face-to-face learning.⁵¹ (5) Quora is a type of application used for learning because it has a study space that functions as an online community. Users with similar interests or talents can discuss and share information about specific topics in the study room. Teachers can use this application as a question and answer that allows users to ask questions, read, and share knowledge with students and other friends.⁵² (6) Lectora. This is an effective program for creating learning media. The Lectora Inspire type application is an electronic learning development software (e-learning) that is relatively easy to apply or apply because it does not require an understanding of sophisticated programming languages and is suitable when used in learning.⁵³

⁴⁶ Adela Redes et al., "The Effect of the Organizational Climate on the Integrative–Qualitative Intentional Behavior in Romanian Preschool Education—A Top-Down Perspective," *Behavioral Sciences* 13, no. 4 (April 19, 2023): 342, <https://doi.org/10.3390/bs13040342>.

⁴⁷ Imroh Atul Musfiroh, "Pendayagunaan Pusat Sumber Belajar (PSB) DI IAIN Samarinda," *SYAMIL: Jurnal Pendidikan Agama Islam (Journal of Islamic Education)* 7, no. 1 (June 1, 2019): 1–15, <https://doi.org/10.21093/sy.v7i1.1421>.

⁴⁸ Wan Zulkifli Wan Kassim, "Google Classroom: Malaysian University Students' Attitudes towards Its Use as Learning Management System," *Brazilian Journal of Development* 10, no. 1 (January 4, 2024): 207–23, <https://doi.org/10.34117/bjdv10n1-015>.

⁴⁹ Aleksandar Janković, Mirjana Maričić, and Stanko Cvjetičanin, "Comparing Science Success of Primary School Students in the Gamified Learning Environment via Kahoot and Quizizz," *Journal of Computers in Education* 11, no. 2 (June 1, 2024): 471–94, <https://doi.org/10.1007/s40692-023-00266-y>.

⁵⁰ Suzan Al-Abidi, Amjad Owais, and Farah Alabedi, "The Effects of Using MS Teams Mobile Application on Language Learners' Motivation During and After the Covid-19 Pandemic," *World Journal of English Language* 13, no. 2 (February 14, 2023): 260–70, <https://doi.org/10.5430/wjel.v13n2p260>.

⁵¹ Zamrin Md Zin, "Canvas LMS Course Design: Create and Deliver Interactive Online Course on the Canvas Learning Management System : A Book Review," *Asean Journal of Engineering Education* 7, no. 1 (June 25, 2023): 20–23, <https://doi.org/10.11113/ajee2023.7n1.115>.

⁵² Sari Dewi Noviyanti, "Student's Perspective of Using Quora: An Authentic Learning Experience in Digital Platform," *SAGA: Journal of English Language Teaching and Applied Linguistics* 4, no. 1 (January 17, 2023): 45–52, <https://doi.org/10.21460/saga.2023.41.152>.

⁵³ Shakila Zulima Marindra and Silvi Yulia Sari, "Role of Lectora Inspire Based Learning Media on the Achievement of Higher Order Thinking Skill: Literature Review," *Physics Learning and Education* 1, no. 4 (December 26, 2023): 195–203, <https://doi.org/10.24036/ple.v1i4.77>.

Second, the application of learning at MA Al-Mukhlisin emphasizes the blended learning model. The blended learning model is a learning model that combines face-to-face learning methods with online-based learning.⁵⁴ This model allows students to access subject matter through digital platforms while still getting direct interaction with teachers in the classroom, which provides flexibility in the teaching-learning process so that it can adjust to the needs of students and the dynamics of modern learning in the digital era.^{55;56} Blended learning aims to improve the quality of learning by utilizing technology as a supporting tool. In addition, blended learning is designed to optimize face-to-face time in class, with a focus on discussion, collaboration, and deepening of material that is difficult to understand independently.⁵⁷ On the other hand, the benefits of blended learning are very diverse. This model allows students to learn according to their pace and learning style. Overall, blended learning encourages technology integration in education, making the learning process more relevant to the needs of the 21st century.⁵⁸

Third, implementing learning at As-Sahihyah High School emphasizes the hybrid learning model. The hybrid learning model is an educational approach combining face-to-face and online learning in one integrated system. In this model, students learn through in-person classroom meetings and digital or online platforms. The main goal of hybrid learning is to create a more adaptive learning process for students in the digital era.⁵⁹ This model provides a holistic learning experience, where students can learn independently through online resources and discuss the material directly with teachers or classmates.⁶⁰ In addition, hybrid learning aims to increase student engagement in learning while also preparing them for the challenges of technology in the 21st century. Students can repeat difficult-to-understand material online and use face-to-face time for more in-depth discussions. So that teachers can also personalize learning based on student needs, improving the overall quality of education.⁶¹

Fourth, during the implementation learning at MA Al-Mukhlisin and As-Sahihyah High School, the disruption era has several obstacles, including (1) the Availability of Facilities and Infrastructure. Many schools need technological devices such as computers, projectors, or adequate internet networks to support digital-based learning. In addition, inappropriate or insufficient classrooms often hinder teaching and learning activities. On the other hand, some students also face similar challenges, such as not

⁵⁴ Akhmad, *Kurikulum Merdeka Pada Pembelajaran Di Madrasah*, 161–62.

⁵⁵ Agus Setiawan, "Conceptual of Blended Learning as Islamic Education Study Program Learning Reform Action in Digital Era 4.0," *SYAMIL: Jurnal Pendidikan Agama Islam (Journal of Islamic Education)* 7, no. 2 (December 1, 2019): 119–29, <https://doi.org/10.21093/sy.v7i2.1827>.

⁵⁶ Meiria Nurphi, Bima Fandi Asy'arie, Rachmad Arif Ma'ruf, and Weni Mariyana, "Menggali Dampak Penerapan Kurikulum Merdeka: Tinjauan Antara Keunggulan, Manfaat Dan Persepsi Negatif," *Mauriduna: Journal of Islamic Studies* 5, no. 2 (2024): 380–97, <https://doi.org/https://doi.org/10.37274/mauriduna.v5i2.1199>.

⁵⁷ Najwa Amanina Bizami, Zaidatun Tasir, and Si Na Kew, "Innovative Pedagogical Principles and Technological Tools Capabilities for Immersive Blended Learning: A Systematic Literature Review," *Education and Information Technologies* 28, no. 2 (February 2023): 1373–1425, <https://doi.org/10.1007/s10639-022-11243-w>.

⁵⁸ Shariful Islam Shakeel, Md Faruque A. Haolader, and Mst Sharifa Sultana, "Exploring Dimensions of Blended Learning Readiness: Validation of Scale and Assessing Blended Learning Readiness in the Context of TVET Bangladesh," *Heliyon* 9, no. 1 (January 2023): e12766, <https://doi.org/10.1016/j.heliyon.2022.e12766>.

⁵⁹ Pardomuan Nauli Josip Mario Sinambela et al., *Model-Model Pembelajaran* (Sada Kurnia Pustaka, 2022), 113.

⁶⁰ Lestari et al., "Hybrid Learning on Problem-Solving Abilities in Physics Learning: A Literature Review," *Journal of Physics: Conference Series* 1796, no. 1 (February 1, 2021): 012021, <https://doi.org/10.1088/1742-6596/1796/1/012021>.

⁶¹ Neni Hermita et al., "Hybrid Learning, Blended Learning or Face-to-Face Learning: Which One Is More Effective in Remediating Misconception?," *Quality Assurance in Education* 32, no. 1 (January 9, 2024): 64–78, <https://doi.org/10.1108/QAE-02-2023-0019>.

having a personal digital device, such as a laptop or smartphone, making it difficult to keep up with online learning.⁶² (2) Internet accessibility. Many students, especially those in remote or underdeveloped areas, face difficulty accessing online learning due to limited or unstable internet networks. This hinders them from following the learning material optimally and interacting with teachers. In addition, some parents also have difficulty providing the tools needed to adjust to the applicable curriculum.⁶³

Further, (3) Motivation for Learning Discipline for Students. Online learning requires high independence, making it difficult for some students to focus and concentrate. Without direct supervision, many students feel less motivated to follow the lessons seriously, impacting their understanding of the material. In addition, irregularities in following the learning schedule are also a problem because some students are not used to a flexible system to require more attention from teachers and parents to keep their enthusiasm for learning.⁶⁴ (4) Inequality of Teacher Readiness in the Use of Technology. Some madrasahs and schools still need help preparing adequate infrastructure and human resources to support technology-based learning. In addition, many teachers are not used to digital devices or online learning platforms, so they need help delivering material effectively. On the other hand, students also need help operating devices or applications used in online learning with the rapid use of technology.⁶⁵

5. Conclusion

The research findings have been conducted at MA Al-Mukhlisin Blega and SMA Ash-Shahihyah Blega, Bangkalan Regency, East Java. First, there is a difference in the leadership style model of the two schools, where there is a democratic leadership spirit and the implementation of bottom-up management. Then, the attitude of authoritarian leaders who are paternalistic or top-down management. Second, there are two learning models: blended and hybrid. Then, the education staff used several applications such as (*Google Classroom, Kahoot, Microsoft Teams, LMS Canvas, Quora, and Lectora*). On the other hand, several obstacles include the lack of availability of facilities and infrastructure, internet accessibility, motivation for learning discipline for students, and inequality in teachers' readiness for the use of technology. Thus, this article provides a deeper understanding of the leadership model of madrasah and school heads in formulating learning policies in the era of disruption so that it can be used as a reference in developing adaptive education strategies.

In addition, the analysis of policy implementation provides a real picture of the effectiveness of learning practices in the field, which contributes to improving the quality of education and strengthening the madrasah management system in the era of technological change. Although this study highlights the leadership model of school

⁶² Ahmad Swandi et al., "Digital-Based Learning in Lagging Area: Students' Problems and Expectations," *AL-ISHLAH: Jurnal Pendidikan* 16, no. 3 (September 13, 2024): 3227–36, <https://doi.org/10.35445/alishlah.v16i3.2875>.

⁶³ Zuheir N. Khlaif, Soheil Salha, and Bochra Kouraiichi, "Emergency Remote Learning during COVID-19 Crisis: Students' Engagement," *Education and Information Technologies* 26, no. 6 (November 27, 2021): 7033–55, <https://doi.org/10.1007/s10639-021-10566-4>.

⁶⁴ Septiani Selly Susanti et al., "Innovative Digital Media in Islamic Religious Education Learning," *Jurnal Pendidikan Agama Islam* 21, no. 1 (June 30, 2024): 40–59, <https://doi.org/10.14421/jpai.v21i1.7553>.

⁶⁵ Kamarul Azmi Jasmi, Rasidah Bt Sahran, and Muhamad Amirul Amin Mohamad Nazim, "A Student-Centered Teaching and Learning Approach Among Excellent Teachers of Islamic Education," *SYAMIL: Jurnal Pendidikan Agama Islam (Journal of Islamic Education)* 10, no. 2 (December 6, 2022): 113–26, <https://doi.org/10.21093/sy.v10i2.6156>.

principals and madrasas in implementing learning policies in the era of disruption, there are still limitations. The study included only two target cases, given the study's different levels and limited location. Therefore, further research that includes more diverse cases and larger samples is needed to gain a deeper and more comprehensive understanding. So, this research can help as a reference for further study and how to formulate educational policies in schools and madrasas that are more effective in achieving quality education by learning skills in the 21st century.

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