**Adaptive Leadership in Character Education: Insights from SMP Negeri 3 Kasihan, Bantul, Indonesia**

Annisa Rizki Pratiwi 1\*, Sibawaihi 2

1 2 Sunan Kalijaga State Islamic University Yogyakarta, Indonesia

|  |  |
| --- | --- |
| **Article Info** | **Abstract** |
| ***Article history:***Received: 05/27/2023Revised: 06/07/2023Accepted: 06/18/2023 | **Purpose**  – This research examines the pivotal role played by the Head of SMP Negeri 3 Kasihan in implementing character education strengthening. It seeks to explore the process of implementing character education, shedding light on the key supporting and inhibiting factors during the Industrial Revolution era 4.0 and the challenges posed by the COVID-19 pandemic.**Design/methods/approach**  – Conducted as a qualitative study, this research utilized a field survey approach employing descriptive analysis. The study occurred at SMP Negeri 3 Kasihan and used data collection methods such as observation, interviews, and documentation. An inductive method was applied, concluding specific facts to generalize findings.**Findings**  – The research findings reveal three main points: (1) The Head of the school serves various roles, including manager, educator, administrator, supervisor, leader, and innovator, in implementing character education strengthening. (2) In the era of Industry 4.0, the process involves personality development through scouting and the introduction of technology. Character-strengthening education was conducted during the pandemic through distance, online, and blended learning. (3) Students adapt to the times, with online implementation a significant supporting factor. However, challenges include suboptimal material delivery and a lack of direct monitoring due to the online learning environment.**Research implications/limitations**  – The impact of this research extends to educational policymakers and practitioners, emphasizing the multifaceted role of school leaders in character education. Rules include the specific context of SMP Negeri 3 Kasihan and the challenges the online learning environment poses.**Practical implications**  – The study underscores the need for adaptive approaches in character education implementation, recognizing the role of school leaders as crucial in overcoming challenges, especially in the context of the Industrial Revolution era 4.0 and the pandemic.**Originality/value**  – This research contributes to the literature by providing insights into the specific challenges and strategies the Head of SMP Negeri 3 Kasihan employs in implementing character education during dynamic times. The study's originality lies in examining the dual impact of Industry 4.0 and the pandemic on character education, offering valuable lessons for educational institutions navigating similar challenges. |
| ***Keywords:****Character Education, Industrial Revolution 4.0, The Role of The Principal.* |
| *© 2023 by the authors. It was submitted for possible open-access publication under the terms and conditions of the Creative Commons Attribution (CC BY NC) license (http://creativecommons.org/licenses/by/4.0/).* |



***Contact:*** ***\*****Annisaichariz@gmail.com*

**Introduction**

The world has entered the Era of Industrial Revolution 4.0, marked by increased connectivity, digital developments, artificial intelligence, virtual intelligence, and almost all machines connected to the internet, causing society to change significantly. The industrial revolution was introduced by Professor Klaus Schwab, a famous economist from Germany and the founder of the World Economic Forum (WEF). The emergence of this era has various impacts on the life sector, one of which is the impact on the education system. The progress and development of education are also the result of the Industrial Revolution, which indirectly changed a country's educational and economic order (Rahman & Nuryana, 2019). In this case, it provides impacts and challenges for students as the young generation of the Indonesian nation and also in the world of education. Currently, the digitalization of the education system is a prominent challenge, so every element in the education sector must be able to adapt to various changes. This era requires human resources who can compete and are competent globally (Risdianto, 2019).

The positive impact of the Industrial Revolution 4.0 era has provided developments in the world of education. However, apart from that, this era has had a negative effect, namely reduced understanding about strengthening character education, especially for school children. The reduction in PPK impacts the erosion of the nation's national identity and the abandonment of noble values, giving rise to educational problems which result in the development of the quality of education being hampered. Issues ranging from the emergence of brawls between students to radicalism, crime, and intolerance, which still often occur today, arise due to the lack of optimal implementation of character education for school children (Pratama, 2019). In Presidential Decree 87 of 2017, there is the National Mental Revolution Movement (GNRM), which states that strengthening character education (PPK) is a movement that aims to make students' characters stronger. In the National education system, Law No. 20 of 2003 aims to create students devoted to God Almighty, who become human beings who are responsible, have noble characters and are helpful and knowledgeable (UU no. 87 of 2017).

The Indonesian education curriculum includes strengthening character education in the national education system. This character education policy does not change the content of the national education curriculum. The objectives of this policy cover the cognitive, affective, and psychomotor aspects listed in the 2013 curriculum content. Apart from receiving academic learning, students must be provided with character education because of the importance of instilling the noble values that students need to understand and implement character education optimally. The implementation of character education in the school environment influences students' interactions in the community so that students are not only knowledgeable people but also people who have noble characters, are devoted to God, and respect each other. Character education is a habit, so character formation requires a specific community in society that can shape character. School is critical because it is a *community of nature*. They are developing school character education through extracurricular activities, learning processes, and collaboration with the community (Komara, 2018).

In 2016, the Ministry of Education and Culture launched PPK in stages. The problem of students' character is the most crucial challenge. Character education is essential to create quality human beings due to the challenges of globalization. Schools only encourage students to be academically competent without being balanced with forming intelligent and robust character. Therefore, character education is increasingly showing its urgency. , it is hoped that it will restore national values, which have begun to fade with the times (Jalil, 2012). The student PPK process cannot be separated from the leadership role of the school principal. The school principal is responsible for the sustainability of the organization and the implementation of policies. As an administrator, the head functions to organize, plan, direct, coordinate, and supervise activities in the school environment. This is because schools are complex institutions that require the coordination of the principal as the central point of the school (Nasrun, 2016).

The school principal determines the success of PPK in educational institutions because the school principal determines the direction of educational policy. The failure and success of this policy are the principal's responsibility as an agent of change and leader in the school (Susanti et al., 2020). As a stakeholder, the role of the school principal is vital because a principal plays a crucial role in determining the process, direction, and implementation of character education policies in schools (Ajmain & Marzuki, 2019). The Industrial Revolution 4.0 era requires leaders to have special skills to survive and answer various educational challenges in this digital era (Jannah, 2020).

PPK is necessary to implement because it aims to equip and turn students into the golden generation of 2045, who can face the dynamics of change in the 21st century. The novelty of this research is to learn about the role of school principals and the implementation process of strengthening character education (PPK) in the era of the Industrial Revolution 4.0, which has many changes. Seeing the phenomenon occurring among Indonesian students currently, the national character is starting to fade, and the difference in the learning process online due to the COVID-19 pandemic means that the implementation process cannot be carried out face to face.

**Methods**

The research was carried out using qualitative methods. The approach used was descriptive (Saryono, 2010). explains that qualitative research is used to discover, describe, investigate, and explain the quality of social influence that cannot be measured, presented, or depicted using a quantitative approach. Data collection techniques use interview, observation, and documentation methods. The data validity technique uses data triangulation. According to (Sugiyono, 2013), triangulation is a data collection technique combining data obtained from various existing sources and methods. Data triangulation can be done through source triangulation by testing the credibility of the data by checking data obtained from several sources and technical triangulation by examining data from the same head with different techniques. Data analysis techniques are carried out from the collection process until the data collection is complete. Data from the field is then processed and analyzed using transcription, coding, grouping, comparing and contrasting, and interpretation methods. The informants in this research were the school principal, PPK teachers, and students.

**Results**

1. The Leadership Role of the Principal in the Implementation of Strengthening Character Education (PPK) at SMP Negeri 3 Kasihan

The role of Principal according to E. Mulyasa, the Principal has the following functions and duties:

First, the Principal is the Manager. To improve the quality of an educational institution and run programs, the principal acts as a manager to direct the teaching staff and all elements of the school. The function and duties of the Principal as a manager include planning programs, starting from HR to preparing policies and programs. Next, organize the program by involving an organizational structure and dividing tasks according to the teacher's abilities. Furthermore, the role of the school principal as a manager is to implement the program by mobilizing teaching staff, providing role models, and developing morals. Apart from that, as a manager, the Principal plays a role in monitoring and evaluation, which is carried out through supervision regarding improving the quality of education consisting of human resources, vision, mission, goals, performance, and output implemented in the school. (Rosyadi & Pardjono, 2015) .

As a manager, the functions and duties of the Principal of SMP Negeri 3 Kasihan include planning from HR to program supervision. In planning, it is contained in the school's vision, mission, and goals to realize the character of students with noble character, increasing students' potential in skills, sports, arts, culture, and technology. In implementing it in schools, PPK is implemented using a school-based plan that is integrated into the RPP and appears in the syllabus. In implementing the program, the school principal acts as a facilitator, working with the student's parents and advising teachers to approach students to build their character. Next, control the program to improve or maximize program implementation and find out the obstacles faced.

Second, the principal is an educator. As an educator, the principal must create a conducive school climate or conditions, provide direction and advice to all school members, create attractive learning models, and encourage all teaching staff. (Rusdiana, 2018) . In leadership, the principal, as an educator, must create a conducive environment for the school community. To create a conducive school environment, the Principal also provides moral guidance for teachers when regular meetings are held regarding attitudes and actions by applicable norms and culture.

Third, the Principal is the Administrator. As an administrator, the principal has the task of monitoring teacher performance. According to Purwanto (2004), as an administrator, the principal makes plans, structures the school organization, and coordinates personnel management. In carrying out his leadership duties, the Principal is responsible for preparing plans within educational institutions. Apart from planning, an organization is an administrative and management function in an educational institution. This organization functions as a means for carrying out administrative activities to achieve predetermined goals. To carry out his role as an administrator in a school, the principal needs to organize an organization to distribute tasks and authority according to the structure that has been prepared. With good organization from the principal, an organization can better implement a cooperation system for goals aligned with the school's vision and mission. (Khalifah, 2019)

The duties and responsibilities of the Principal as an administrator at SMP Negeri 3 Kasihan are seen in the implementation of managerial administration from planning to supervision. Apart from that, curriculum, student affairs, community relations, finance, and infrastructure are also the responsibility of the School Principal. Community relations are the relationships the school establishes with the student's parents, the community, and the school committee. The PPK curriculum has been implemented in the RPP and appears in the learning syllabus so that it is clear that the teacher can develop the activities. Apart from curriculum administration, the Principal has the authority to improve teacher performance; teachers are an essential part of the learning implementation process, and existing programs in the school improve teacher performance; the Principal holds teacher deliberations and motivation related to Character Education. The Principal's strategy to improve teacher performance in this digital era is by providing training in the use of online learning media so that the quality of teachers when providing material to students increases.

Fourth, the Principal is the Supervisor. The principal is a supervisor in the educational institution he leads. His duties as a supervisor include coaching, supervision, direction, and guidance to teaching staff and school residents. As a supervisor, a Principal must have the skills and knowledge regarding the functions and duties of his members. Learning and existing programs are activities at the school. To make the program successful and smooth, the principal guides the performance carried out by the teaching staff. This is done to increase the professionalism of the teaching staff. The prominent role of a school principal in his function as an educational supervisor is to provide guidance and direction to teaching staff so that they are professional in carrying out their obligations in implementing learning. (Fitri, 2019) . The principal has a supervision strategy by monitoring the implementation of the Character Education program. The Principal does this to ensure that the Character Education program the teacher implements runs optimally.

Fifth, the Principal as a Leader. The principal, the highest leader in an educational institution, must always play an active role in running school activities and programs. A school principal leader must be able to implement, lead, plan, and supervise relationships between its members, give sanctions to violators, take action, and be responsible for what he leads (Purwanto, 2002).

From this opinion, the principal's leadership skills can improve the quality of a school and positively impact its running in the education and teaching process. The personality authority or authority of a school principal is a characteristic that must be possessed because of its function in directing subordinates to carry out a job. From the description above, the Principal is expected to maintain good relations with all school members and must always be responsive and enthusiastic in handling several problems in the learning process. As a leader, the Principal must be able to collaborate and have extensive knowledge. (Juarman et al., 2020) . The Principal of SMP Negeri 3 Kasihan applies democratic leadership strategies in developing Character Education. The leadership of the Principal of SMP Negeri 3 Kasihan is democratic; this can be seen in his attitude, which applies togetherness and kinship while running programs at the school and provides space for all teaching staff to have an opinion.

Sixth, School Principals as Innovators. As an innovator, the Principal has a strategy for finding something new to develop a school. This effort includes developing innovative learning models, looking for new ideas, and guiding all school members. (Moh. Rois, Fartika Ifriqia, 2017) . To carry out his function as an innovator, the Principal encourages and supports implementing suitable learning activities, thereby increasing student learning achievement. Apart from that, establishing good relationships with students' parents is a form of building cooperation to implement new ideas formed by the Principal. (Mahyuddin, Aunurrahman, n.d.) . The Principal of SMP Negeri 3 Kasihan said he must have good communication skills to build harmonious relationships between school members. Apart from that, it is essential to look for new ideas to develop learning methods and the quality of teaching staff so they can carry out their duties. The strategy carried out by the principal to increase teacher professionalism can be seen in the exemplary actions taken. Ideal as a form of good examples, such as the disciplined attitude of teaching staff, in addition to the instance of the Principal of SMP Negeri 3 Kasihan, must be able to create a work situation that is conducive and enjoyable. This is so teaching staff can quickly adapt and develop in their duties.

1. Implementation of Strengthening PPK Character Education at SMP N 3 Kasihan in the Industrial Revolution 4.0 Era and the Pandemic Period

The Strengthening Character Education (PPK) policy is essential for students who face various problems that will arise in the future. The Presidential Decree aims to equip and develop students to become Indonesia's golden generation in 2045 who have the spirit of character education and Pancasila, which can be used when dealing with the dynamics of change in the future, which can make the national education platform increasingly developed by making character education the leading spirit. They are holding education. Based on Presidential Regulation No. 87 of 2017 Regarding Strengthening Character Education, the meaning of Strengthening Character Education is an educational movement that is the responsibility of academic units to strengthen students' character through the harmonization of thought, feeling, heart, and sports, which involves the cooperation of several parties.

Through this PPK, the government wants to build the nation's generation by harmonizing four dimensions: the exercise of the heart, the practice of feeling, thought, and training. SMP Negeri 3 Kasihan is guided by Permendikbud No. 20 of 2018 and Presidential Decree 87 of 2017 concerning strengthening character education, making PPK a program that must be implemented in subjects and given to students.

First, Implementation of PPK at SMP Negeri 3 Kasihan in the Era of Industrial Revolution 4.0. The era of Industrial Revolution 4.0 has impacted the world of education; in the 21st century, students must have the skills to think critically, creatively, and innovatively, solve problems, and be skilled in using technology. Apart from the skills that students must have, they must also protect themselves from deviant and detrimental behavior with good morals. In this digital era, character education is vital to instill in students to form a generation with morals, considering that in the era of Industrial Revolution 4.0, internet use has become a necessity, and today's young age is very closely related to the internet and technology. The school hopes that by introducing and equipping students with the PPK that has been provided, students can apply it at school and in society.

The program aims to strengthen character education in the era of Industrial Revolution 4.0 by instilling character education values, which are expected to equip students as the next generation with character.

Implementation of strengthening character education at SMP Negeri 3 Kasihan in the era of Industrial Revolution 4.0 through personality development in scouting activities. Apart from the five interrelated values, the school added scouting in facing the period of Industrial Revolution 4.0. Through scouting, students learn about discipline and technology and get to know nature, society, and religion. With school scouting, students' personality traits are formed. In the digital era and at the same time as the current pandemic, the blended learning method is the right choice for schools to implement. The implementation of Strengthening Character Education applies this method in its performance; assignments are given online, and sometimes, you have to come to school to collect commissions. The teacher also allows students to ask if there are problems in doing the assignment. Blended learning in the digital era is the first step in preparing students to follow existing technological developments. Independent character values can be formed through this method because limited interaction between teachers and students makes students more curious and allows them to explore information through technology independently.

Second, Implementation of PPK at SMP Negeri 3 Kasihan during the Pandemic. During this pandemic, the Character Education Strengthening Program has been implemented at SMP Negeri 3 Kasihan, which has been running for almost 1.5 years since the end of 2019. From research data from interviews conducted at SMP Negeri 3 Kasihan through the Principal, Teachers, and Students, Strengthening Character Education (PPK) is still carried out through distance learning (PJJ). The school strives to continue implementing PPK as much as possible so that it can be helpful for students. Through the tasks given, the Principal hopes to shape character in students.

 Implementing Strengthening Character Education at SMP Negeri 3 Kasihan is carried out by existing activities at school. During this pandemic, actions are realized through school assignments, collected via online learning platforms, or coming directly to school. The tasks to strengthen character education are mandatory worship, helping parents, socializing, and working on questions that contain nationalist values and integrity. The school applies the six values of Strengthening Character Education (PPK): religious, independent, cooperative, nationalist, integrity, and scouting. During this pandemic, strengthening character education (PPK) was not optimal due to limited distance learning (PJJ). So, direction from school principals and teachers is only given via social media, and habitual activities can only be carried out independently at home.

Third, Implementation Methods for Strengthening Character Education at SMP Negeri 3 Kasihan during the Pandemic. Implementing Strengthening Character Education during the pandemic requires methods with the aim that students can understand the material provided. With the distance learning model (PJJ) being deemed less effective, schools continue to maximize their efforts to carry out teaching and learning activities, including Strengthening Character Education. The method used in implementation is habituation and attitude assessment, which is the final stage taken by the teacher to see whether the results of instilling character values in students have been accepted.

**Discussion**

This research aims to explore the critical role of the Principal of SMP Negeri 3 Kasihan in implementing Strengthening Character Education (PPK) in the era of the Industrial Revolution 4.0. In this context, the role of leadership becomes crucial, as stated by Mthanti & Msiza (Mthanti & Msiza, 2023), which emphasizes the importance of the principal's indirect influence on teachers' professional development, particularly in the integration of ICT for 21st-century education. As demonstrated by Želvys et al., effective leadership indirectly increases school effectiveness through organizational climate and citizenship behavior. This research focuses on the leadership approaches taken by School Principals in facing the unique challenges presented by the digital era and the COVID-19 pandemic.

The research results indicate that the Principal plays a multifaceted role as a manager, educator, administrator, supervisor, leader, and innovator in implementing PPK. This finding is interesting because it shows that effective education leadership is not limited to one or two roles but involves a variety of interrelated functions. The principal manages administrative aspects and school policies and acts as a figure of education and innovation. This is to the findings of Wang & Zhang (Wang & Zhang, 2021), which found that principal support significantly influenced teachers' professional skills, which was mediated by inclusive school practices and teacher agency.

This finding aligns with several previous studies showing the vital role of school principals in various aspects of education. As stated by Kwatubana et al. (Kwatubana et al., 2022), school principals in South Africa understand their role in school health promotion, focusing on improving health regardless of conceptual differences. This research confirms the importance of school principals in managing curriculum change and building a collaborative culture, as explained by Mestry & Govindasamy (Mestry & Govindasamy, 2021). In addition, the agile leadership of school principals, as identified by Özgenel et al. (Özgenel & Aksu, 2020), correlated significantly with teacher job satisfaction, indicating that responsive and adaptive leadership is essential in today's educational context.

The findings show that the Principal of SMP Negeri 3 Kasihan has successfully integrated various leadership roles to meet the needs for character education in the digital era. This integration includes a comprehensive approach to school management, learning, and human resource development. The role of school principals as innovators, in particular, is essential in facing the challenges posed by the Industrial Revolution 4.0 and the pandemic. This shows the importance of proactive and adaptive leadership in facing changes and new challenges.

The significance of this finding also lies in how school principals manage relationships between various stakeholders, including teachers, parents, and students, in the context of KDP. This reflects the research of Medina et al. (Medina et al., 2019), which emphasizes the dual role of principals in instructional leadership, especially in school transformation. Principal leadership skills in managing these interactions are essential for creating a conducive and inclusive learning environment, in line with the findings of Khaleel et al. (Khaleel et al., 2021) on the role of school principals in creating and promoting inclusive schools in the UAE.

In the digital era and pandemic context, the Principal's leadership has significantly adapted to new learning methods, such as blended learning. This reflects the need to prepare students to keep up with technological developments while maintaining the values of character education. This approach is also in line with research by Lv et al. (Lv et al., 2023), which shows the impact of cognitive fusion in school principals during the COVID-19 pandemic on depression, with psychological vulnerability as a mediator and self-esteem as a moderator.

These findings imply the importance of recognizing school principals' diverse and dynamic leadership roles in character education in the modern era. The Principal of SMP Negeri 3 Kasihan shows how effective leadership can overcome contemporary challenges, such as technology integration and distance learning while focusing on student character development. This kind of leadership can be a model for other schools facing similar challenges, emphasizing the importance of adaptation, innovation, and a holistic approach to education.

**Conclusion**

Research on the role of the principal in implementing strengthening character education (PPK) at SMP Negeri 3 Kasihan in the era of Industrial Revolution 4.0 by applying observation, interviews, and documentation methods. Researchers reached the following conclusion: In implementing PPK, the principal has the role of educator, manager, supervisor, administrator, leader, and innovator. As a school principal manager, he is responsible for everything from program planning to controlling the program. Planning is visible in the vision, mission, and goals, integrated into the RPP and learning syllabus. Meanwhile, managing is carried out by the school principal to improve PPK and find obstacles during the implementation process. The school principal acts as an educator in implementing PPK to create a conducive learning environment with moral development for teaching staff. As an administrator, I have worked in managerial administration, curriculum, student affairs, public relations, finance, facilities, and infrastructure. As a leader with a democratic leadership strategy that involves all school elements in decision-making. As an innovator with new ideas for developing learning methods.

Implement a program to strengthen character education at SMP Negeri 3 Kasihan in the era of Industrial Revolution 4.0 by developing scouting personalities in addition to the five-character values implemented. Apart from scouting, the school equips students with technology to adapt to current developments and remain a wise generation with character in using technology. Implementation of the program to strengthen character education at SMP Negeri 3 Kasihan during the pandemic, PPK was carried out through online learning and blended learning.

**References**

Ajmain, & Marzuki. (2019). Peran guru dan kepala sekolah dalam pendidikan karakter siswa di SMA Negeri 3 Yogyakarta The role of teachers and headmaster in character education of student of SMA 3 Yogyakarta. *Jurnal Ilmu-Ilmu Sosial*, *16*(1), 110–111.

Fitri, F. (2019). Peran Kepala Sekolah Sebagai Supervisor Dalam Membina Profesionalisme Guru. *Adaara: Jurnal Manajemen Pendidikan Islam*, *8*(1), 730–743. https://doi.org/10.35673/ajmpi.v8i1.415

Jalil, A. (2012). Karakter Pendidikan untuk Membentuk Pendidikan Karakter Abdul Jalil Sekolah Tinggi Agama Islam Negeri Kudus. *Nadwa: Jurnal Pendidikan IslamJurnal Pendidikan Islam*, *6*(2), 176.

Jannah, L. K. (2020). Kepemimpinan Kepala Sekolah dalam Menghadapi Era Revolusi Industri 4.0: Perspektif Manajemen Pendidikan. *Islamika*, *2*(1), 129–139. https://doi.org/10.36088/islamika.v2i1.471

Juarman, J., Rahmawati, N. N., & Lestari, D. (2020). Peran Kepala Sekolah Sebagai Leader dalam Meningkatkan Disiplin Kinerja Guru di SDN 02 Josenan Kota Madiun. *Publikasi Pendidikan*, *10*(2), 107. https://doi.org/10.26858/publikan.v10i2.11649

Khaleel, N., Alhosani, M., & Duyar, I. (2021). The Role of School Principals in Promoting Inclusive Schools: A Teachers’ Perspective. *Frontiers in Education*, *6*. Scopus. https://doi.org/10.3389/feduc.2021.603241

Khalifah, S. (2019). Peran Kepala Sekolah sebagai Administrator dan Supervisor. *Journal of Administration and Educational Management*, *126*(1), 1–7.

Komara, E. (2018). Penguatan Pendidikan Karakter dan Pembelajaran Abad 21. SIPATAHOENAN: South-East Asian Journal for Youth, Sports & Health Education, 4(1), 17–26.

Kwatubana, S., Nhlapo, V. A., & Moteetee, N. (2022). The role of principals in school health promotion in South Africa: A qualitative study. *Health Education*, *122*(3), 304–317. Scopus. https://doi.org/10.1108/HE-08-2020-0078

Lv, J., Qiu, Q., Ye, B., & Yang, Q. (2023). The Effects of Cognitive Fusion on Depression in Primary School Principals During the COVID-19 Pandemic: The Mediating Role of Psychological Vulnerability and the Moderating Role of Self-Esteem. *Psychology Research and Behavior Management*, *16*, 1727–1739. Scopus. https://doi.org/10.2147/PRBM.S404894

Mahyuddin, Aunurrahman, M. T. (n.d.). Peran Kepala Sekolah Sebagai Inovator Dalam Meningkatkan Disiplin Kerja Guru Sekolah Dasar. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa*, *4*, 1–15.

Medina, N. I., Mansor, A. N., Wahab, J. L. A., & Vikaraman, S. S. (2019). The impact of dual role teaching principals in small schools. *International Journal of Recent Technology and Engineering*, *8*(2 Special Issue 9), 615–622. Scopus. https://doi.org/10.35940/ijrte.B1128.0982S919

Mestry, R., & Govindasamy, V. (2021). The Perceptions of School Management Teams and Teachers of the Principal’s Instructional Leadership Role in Managing Curriculum Changes. *Interchange*, *52*(4), 545–560. Scopus. https://doi.org/10.1007/s10780-021-09425-5

Moh. Rois, Fartika Ifriqia, D. S. (2017). Kepemimpinan Kepala Sekolah Dalam Meningkatkan Kompetensi Guru. *Edudeena*, *1*(2). https://doi.org/10.30762/ed.v1i2.449

Mthanti, B. J., & Msiza, P. (2023). The roles of the school principals in the professional development of teachers for 21st-century Education. *Cogent Education*, *10*(2). Scopus. https://doi.org/10.1080/2331186X.2023.2267934

Nasrun, N. (2016). Pengaruh Kepemimpinan Kepala Sekolah Terhadap Motivasi Kerja dan Kinerja Guru. *Ilmu Pendidikan: Jurnal Kajian Teori Dan Praktik Kependidikan*, *1*(2), 63–70. https://doi.org/10.17977/um027v1i22016p063

Özgenel, M., & Aksu, T. (2020). The power of school principals’ ethical leadership behavior to predict organizational health. *International Journal of Evaluation and Research in Education*, *9*(4), 816–825. Scopus. https://doi.org/10.11591/ijere.v9i4.20658

Pratama, D. A. N. (2019). Tantangan Karakter Di Era Revolusi Industri 4.0 Dalam Membentuk Kepribadian Muslim. *Al-Tanzim : Jurnal Manajemen Pendidikan Islam*, *3*(1), 198–226. https://doi.org/10.33650/al-tanzim.v3i1.518

Rahman, A., & Nuryana, Z. (2019). Pendidikan Islam di Era Revolusi Industri 4.0. *Jurnal Sundermann*, 34–0. https://doi.org/10.31219/osf.io/8xwp6

Risdianto, E. (2019). Analisis Pendidikan Indonesia di Era Revolusi Industri 4.0. *Research Gate*, *April*, 0–16.

Rosyadi, Y. I., & Pardjono, P. (2015). Peran Kepala Sekolah Sebagai Manajer Dalam Meningkatkan Mutu Pendidikan Di Smp 1 Cilawu Garut. *Jurnal Akuntabilitas Manajemen Pendidikan*, *3*(1), 124–133. https://doi.org/10.21831/amp.v3i1.6276

Rusdiana, E. (2018). Peran Kepemimpinan Kepala Sekolah Sebagai Educator dalam Meningkatkan Kompetensi Guru. *Indonesian Journal of Education Management & Administration Review*, *2*(1), 231–236.

Susanti, S., Lian, B., & Puspita, Y. (2020). Implementasi Strategi Kepala Sekolah dalam Penguatan Pendidikan Karakter Peserta Didik. *Jurnal Pendidikan Tambusai*, *4*(2), 1644–1657. https://doi.org/10.31004/jptam.v4i2.629

Wang, Y., & Zhang, W. (2021). The Effects of Principal Support on Teachers’ Professional Skills: The Mediating Role of School-Wide Inclusive Practices and Teacher Agency. *International Journal of Disability, Development and Education*, *68*(6), 773–787. Scopus. https://doi.org/10.1080/1034912X.2021.1950649

Želvys, R., Zabardast, A., Nemati, S., Adak, K., & Shariati, O. (2019). Mindful principals in effective schools: Mediating role of organizational climate and organizational citizenship behavior. *Pedagogika*, *133*(1), 5–27. Scopus. https://doi.org/10.15823/p.2019.133.1