

## Principal Management in Increasing the Quality of Education in the Society 5.0 Era

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### Abstrak

Revolusi industri menjadi sebuah konsep yang memudahkan kehidupan manusia dengan AI sebagai komponen utamanya. Meskipun masyarakat 5.0 menggunakan teknologi modern, namun kuantitas beberapa aplikasi AI masih relatif sedikit yang diproduksi dan dikembangkan lebih lanjut. Keadaan ini memicu perkembangan baru. Pendidikan harus mampu beradaptasi dengan perubahan ini secara tepat. Penelitian ini bertujuan untuk mengkaji terkait manajemen kepala sekolah dalam meningkatkan mutu pendidikan di era society 5.0. Penelitian ini menggunakan pendekatan kualitatif, dengan mengumpulkan data dari penelitian terdahulu kemudian melihat dari hasil wawancara, observasi, dan dokumentasi oleh responden yakni kepala sekolah. Metode yang digunakan dalam penelitian yaitu kajian literatur buku, artikel ilmiah, dan sumber literatur buku, artikel ilmiah, dan sumber literatur lainnya. Hasil dari studi literatur menjelaskan bahwa manajemen kepala sekolah pada era society 5.0 dituntut untuk bisa mengikuti perkembangan digital karena sangat mempengaruhi mutu pendidikan. Dalam meningkatkan mutu pendidikan di era society 5.0, salah satu faktor yang paling penting untuk mencapai hal tersebut dengan memastikan bahwa pemimpin sekolah diberdayakan dalam lembaga pendidikan dimana mereka mampu menjalankan kepemimpinan yang efektif dan efisien.

**Kata kunci:** Manajemen Kepala Sekolah, Mutu Pendidikan, Era Society 5.0

### Abstract

The industrial revolution is a concept that facilitates human life with AI as its main component. Even though society 5.0 uses modern technology, the quantity of several AI applications still needs to be bigger and being produced and developed further. This circumstance sparked new developments. Education must be able to adapt to these changes appropriately. This research aims to analyse the management of school principals in improving the quality of education in the era of society 5.0. This study uses a qualitative approach by collecting data from previous research and then looking at the results of interviews, observations, and documentation by respondents, namely the school principal. The method used in this research is a literature review of books, scientific articles, and literature sources of books, scientific articles, and other literary sources. The literature study results explain that the management of school principals in the era of society 5.0 is required to keep up with digital developments because it dramatically affects the quality of education. In improving the quality of education in society 5.0, one of the most critical factors in achieving this is ensuring that school leaders are empowered in educational institutions where they can carry out effective and efficient leadership.

**Keywords:** Principal Management, Quality of Education, Era of Society 5.0

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## 1. INTRODUCTION

Along with the times, various technological concepts also developed rapidly. One of them is the concept of society 5.0 which was first initiated by the Japanese state which aims to facilitate the needs of the community by using modern technology-based science. For example are Artificial Intelligence (AI), Internet of Things (IoT), and robots (Shahroom & Hussin, 2018; Skobelev & Borovik, 2017). The term society 5.0 has only been popular since 2 years ago. This is a development of the industrial revolution 4.0 or society 4.0. This is why the two concepts do not have much difference. It's just that both have a different focus. The industrial revolution is likely to be a concept that facilitates human life with AI as its main component (Kergroach, 2017; Mutohhari et al., 2021). Even though society 5.0 uses modern technology, it still relies on humans as its main component. This concept creates technological developments that can reduce the gap between people.

After more than a quarter of a century of research and development, the world of education, the quantity of several AI applications is still relatively small which is produced and developed further. However, this situation turned out to be a trigger for new developments after several important things were finally discovered, namely the relationship between system design and experts, the representation of human abilities in using computer programs and human perception itself (Machmud et al., 2021; Serin, 2020). Until the advent of intelligent computer-aided teaching (ICAI), significant progress was made in its development. Education in the current era requires internet technology in learning from an operational or process perspective. Implementation of smart schools with internet of things technology can solve problems in the learning process and has high reliability because it is integrated with cloud computing (Aljuhani et al., 2018; Cordiaz, 2017; Miniawi & Brenjekjy, 2015).

Education is a true guardian and a basic human need. Super-fast changes that occur in the world of education and the world of work caused by the great influence of information and communication technology have caused changes in the requirements and characteristics of education and employment which are not easy to predict (Md-Ali et al., 2016; Norahmi, 2017). Educational resources are everything that is used in the implementation of education which includes educational staff, community, funds, facilities and infrastructure (Mukhlisin, 2021; Syafrizal, 2017; Widiensyah, 2018). The most important management in this era is industrial society 5.0 to renew the development of digital technology to be more advanced in carrying out good managerial, namely influencing the quality of education to face the times (Gandasari et al., 2020; Hermawan et al., 2020). The management of school principals also has an important role, especially in competent management of educational administration in the challenges of the development of industrial society 5.0 (Bush & Glover, 2016; Riyanto et al., 2021; Yuneti et al., 2019). Management knowledge for school principals can be in the form of understanding factual concepts/content provided by individual school principals' activities in management activities to carry out the process of school organizational actions starting from planning, organizing, directing and supervising of the use of resources for school operations (AlAjmi, 2022; Dekawati, 2020; Vangrieken et al., 2017).

The characteristics of professional principal management in the new paradigm of education management will have a positive impact on the society 5.0 era of the school education system and bring about very fundamental changes (Sunaengsih et al., 2019; Syafrizal, 2017; Yulius, 2020). Some characteristics of professional principal base on previous study are 1) Conceptual skills, namely skills that must be mastered by the school mind as well as being able to set strategies. 2) Interpersonal skills, namely the ability of school leaders to work collaboratively, communicate with school staff and create an atmosphere of mutual trust in school programs, which can motivate teachers to improve their performance. 3). Management skills, namely utilizing and empowering all existing resources through planning, organizing, managing, directing, motivating, staffing, supervising, supervising and evaluating activities to produce education. The whole process will enable us to work together by creating, effectively, efficient and quality system. And 4.) Technical skills, namely the skills to apply knowledge, methods, techniques, and equipment to complete certain tasks (Beer & Mulder, 2020; Konstantinidou & Scherer, 2022).

Thus, the skills needed for school leaders as professional education managers are in the form of knowledge, skills and attitudes to carry out activities related to the management of existing resources in schools, habits of thought and professional behavior which are reflected in achieving educational goals in an effective and responsible manner. The principal must be able to draw up a good Education Quality Plan (EQP) (Dasmana et al., 2022; Kooli & Abadli, 2021). Then be able to provide flexibility and space for students, teachers and other education personnel to seek, build, shape, apply and develop science, technology and

art in everyday life. School principal management must be able to be independent because in essence the decentralization of education in the context of regional autonomy gives flexibility to school principals, teachers and supervisors to develop their schools independently (Kin et al., 2018; Riani & Ain, 2022; Wiyono et al., 2020). So that, in preparing the EQP the school principal must be able to design harmonious interactions between school components, so that all school activities can take place in a democratic and pleasant atmosphere.

The quality of education is an assessment of the training process that improves performance and processing needs to develop students' skills and at the same time meet the standards of responsibility set by stakeholders who finance the educational process what about the results (Hermawan et al., 2020; Sulaiman & Ismail, 2020; Wiyono et al., 2020). Based on this, the quality of education is the ability of the education system, both from a management perspective and from the perspective of the education process itself, to effectively evaluate input factors (school class size, teachers, textbooks, learning situations and curriculum, school leadership, and family) so as to form the highest output (Riyanto et al., 2021; Xu & Zammit, 2020).

In this case, national education standards are related to one another, in other words, they are mutually sequential. National education standards are useful for determining minimum criteria for the education system in that country. The researcher is interesting to conduct this study. This research aims to find out the management of school principals in improving the quality of education in the era of society 5.0.

## 2. METHODS

This study uses a qualitative approach with the method of studying literature on books, scientific articles, and literary sources on books, scientific articles, and other literary sources. This literature study is a data collection method that uses library sources (library research) without the need to go into the field (Carvalho et al., 2020; Rahman et al., 2019). The data analysis technique uses descriptive qualitative analysis. This literature study method has several characteristics, namely: a) researchers who use this method will only find data in the form of text and figures, not including events or eyewitnesses; b) the data used in this method is ready-to-use data; c) the data obtained from this method is in the form of secondary data; and d) the data obtained from this method is not limited by space or time (Castleberry & Nolen, 2018; Phuong et al., 2018). Therefore, based on these considerations, the author chose a literature study.

## 3. RESULTS AND DISCUSSION

### Results

The researcher conducted a literature search in accordance with the title of the literature study through the Google Scholar data base. In the early stages there were 13,800 articles identified by researchers. All the articles were then divided into two, namely accepted articles and rejected articles. After that, 8,840 results were obtained which were then screened based on suitability with the title of the literature study. Furthermore, the results of the screening showed that only 155 articles were suitable and after eligibility was carried out, only 5 articles were eligible to be used as material in a literature study. Grid synthesis analysis on literature search is presented in Figure 1.

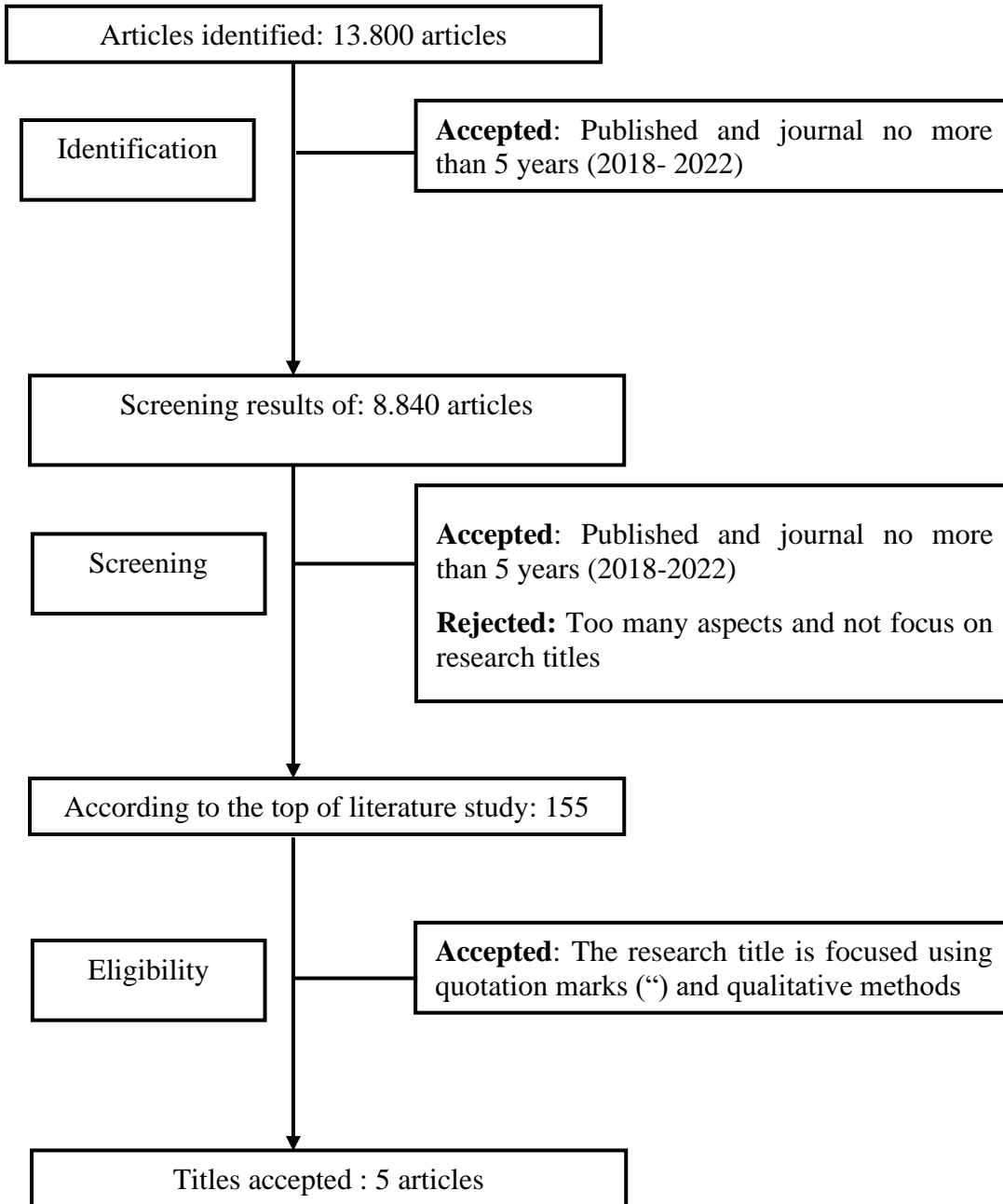


Figure 1. Grid Synthesis Analysis on Literature Search

Table 1. The Results of Literature Review

No	Researcher	Title	Method	Results
1.	(Damayanti & Jumiayati, 2020)	The Role of the Principal in Improving the Quality of Education in the Era of Society 5.0	Qualitative Study	Principal leadership management plays an important role in improving the quality of schools, especially in responding to the globalization era of society 5.0. So that the leadership management carried out can run effectively.
2.	(Sugiarti, 2022)	Literature Study of School Principal	Qualitative Study	In improving the quality of education in the era of the

No	Researcher	Title	Method	Results
		Leadership in Improving School Quality in the Industrial Revolution Era 4.0		industrial revolution 4.0, one of the most important elements to make it happen is the important role of school principal leadership in educational institutions where school principals are able to carry out effective and efficient leadership.
3.	(Khodijah & Haq, 2021)	Principal Leadership Strategy in Improving Education Quality During the Covid-19 Pandemic	Qualitative Study	Principal leadership has an important role in improving the quality of education during the Covid-19 pandemic which has hampered learning activities. School principals need to carry out strategic management as an effort to fortify the school itself so that educational activities can still be carried out and the quality of education can increase during the Covid-19 pandemic.
4.	(Gunawan & Griffiths, 2021)	The Efforts of the Principal in Improving the Quality of Educators at SDN 1 Cikalang Towards the Era of Human Society 5.0	Qualitative Study	The principal's efforts in improving the quality of educators towards the era of human society 5.0 are by making educators at SDN 1 Cikalang have academic qualifications and competencies as learning agents, who are physically and spiritually healthy, and have the ability to realize national education goals.
5.	(Darmaji et al., 2019)	Education and Training Management Development Program for Improving Teacher Quality in the Era of Society 5.0	Qualitative Study	Education and training management for school principals in the current era must carry out updates according to needs, education and training are packaged into activities that can improve mindsets, new innovations, and also mastery of technology for teachers in schools, so that able to create modern learning according to the needs of the times

## Discussion

In [Table 1](#) it can be seen that the method used to find out the management of school principals in improving the quality of education in the era of society 5.0 uses the method of literature study with a qualitative approach. The preparation of this article consists of determining the theme of the discussion, finding reference sources according to the theme of



the discussion, preparing the material, and summarizing the results of several reference articles. Then the qualitative approach is a scientific way to obtain valid or actual data to find evidence and develop knowledge. The approach taken by previous researchers used qualitative, namely by collecting data from previous research and then looking at the results of interviews, observations, and documentation by respondents, namely the school principal.

On the first study emphasizes the role of the school principal in improving the quality of education in the Era of Society 5.0. To improve the quality of education, the role of the school principal is needed so that it can run effectively, namely; Figurehead, Leadership, liaison. Second study explains the readiness of the school principal's leadership so that it can be implemented by always paying close attention to the atmosphere, conditions and local wisdom in the school environment they lead. Efforts that can be made by the principal of the school is to improve and explore the ability of teachers in the educational process, efficient, effective, responsible, accountable (Agustina et al., 2020; Riani & Ain, 2022). Then third study discusses the principal's leadership strategy in improving the quality of education during the Covid-19 pandemic by going through three strategic management processes namely; 1) formulation or strategic planning, 2) strategic implementation, 3) strategic evaluation.

Then, the fourth study emphasizes the principal's efforts to improve the quality of educators at SDN 1 Cikahalang towards the era of human society 5.0 by having four competencies within him, namely, pedagogic competence, personal competence, professional competence, and social competence. Finally, last study explains the development of education and training management towards improving the quality of teachers in the era of society 5.0. The research shows that reforms must be carried out according to needs, education and training are packaged into activities that can improve mindsets, new innovations, and also mastery of technology for teachers in schools, so as to be able to create modern learning according to the needs of the times (Bandur et al., 2022; Tejedor et al., 2019).

In line with previous study wich describe and analyze the planning, implementation, and evaluation of Madrasahs in strengthening the quality of education at MI (Islamic Elementary School) Miftahul Ulum, Kesambenwetan Village, Driyorejo District (Huda & Rokhman, 2021). The research findings obtained that improving the quality of education begins with the commitment of Madrasahs in improving the quality of education, followed by increasing the resources of teachers and education personnel, and principal management and implementation of strategies to improve quality. Similar with other study with aims is to obtain an overview of how the planning, organizing, implementation and evaluation of school principals in improving teacher performance and learning quality (Rostini et al., 2022). This study concludes that the principal management has contributed positively towards the teacher performance and improved the quality of learning.

The implications of this research provide an overview related to principal management in increasing the quality of education in the society 5.0 era. This research will be very useful for educators, especially school principals as a reference with the aim of improving the quality of education in the society 5.0 era. However, this research is limited to a literature review, therefore it is hoped that future research will be able to further deepen and broaden the scope of research by conducting direct data collection methods in the field.

#### **4. CONCLUSION**

Management of school principals in improving the quality of education in the era of society 5.0 is by making school principals have academic qualifications and competencies as learning educators, who are realistic and rational, and have the ability to realize national

education goals. By implementing programs such as involving educators in national seminars and teacher and educational organizations that can increase the knowledge and skills of teaching staff. Leaders, especially in the world of education, are expected to always keep abreast of the times so they can master the progress of digitalization so they are able to compete in facing the challenges and developments in the era of society 5.0 and integrate human labor with technology so that jobs related to physical contact will be reduced and replaced with sophisticated automated systems. so that the opportunity for HR to work will be even more difficult if it is not matched by quality improvement in schools.

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