THE ROLE OF THE HEADMASTER IN IMPLEMENTING MANAGEMENT EDUCATION IN THE SCHOOL ENVIRONMENT

Bahdin Nur Tanjung

Universitas Muhammadiyah Sumatera Utara Email: bahdinnur@umsu.ac.id

Abstract: The Role of The Headmaster Implementing Management Education in the School Environment. The purpose of research on the role of school principals in building education management is to gain a deeper understanding of the role of school principals in leading, organizing, and directing education management activities in schools. Research methodology Library Research Management (LRM) is a type of research methodology used in research in the field of education management. LRM emphasizes the use of library resources as a data source in research. The role of the principal is very important in building good educational management in the school environment. The principal as the main leader in the school is responsible for developing appropriate strategies and policies to improve the quality of education in his school. In building effective education management, school principals must be able to understand their roles and responsibilities, and have sufficient managerial skills to manage existing resources in schools.

Keywords: Management, Environment, School, Education

INTRODUCTION

The principal has an important role in the management of education in the school environment. However, there are several problems that can cause school principals to fail in implementing education management, including a lack understanding of education management. Principals who do not understand the concepts and practices of education management will difficulty planning, organizing, leading and controlling various educational activities in schools. (Shaturaev, 2021) . This can lead to a lack of focus on educational goals and implemented policies (Fedorenko et al., 2019). Lack of managerial skills, a principal must have good managerial skills, such as leadership, decision-making, communication, and delegation skills, without these skills, the principal will have difficulty leading and managing the school properly (Ordonez-Sierra et al., 2020) . Does not utilize educational technology because educational technology can help facilitate education management tasks, such as managing student data, evaluating teacher performance, and developing curricula, however, principals who do not make good use of educational technology may experience difficulties in carrying out their duties efficiently and effective (Sweller, 2020).

Lack of coordination with teaching staff and school employees. Principals who do not have a good relationship with teaching staff and school employees may experience difficulties in coordinating various educational activities in schools (Churiyah et al., 2020). This can lead to a lack of focus on educational goals and policies being implemented. There is no systematic evaluation and improvement. School principals who do not carry out

systematic evaluations and improvements to the educational programs and policies implemented will have difficulties in improving the quality of education in schools (Bragg, 2021). Therefore, efforts are needed to improve the ability of school principals in management, education such providing training and professional development on a regular basis. In addition, there is also a need for support from teaching staff, school employees, and parents of students to create a conducive and supportive educational environment for school principals in carrying out their duties (Garbe et al., 2020). As the main leader in educational institutions, the principal has a very important role in managing and leading these educational institutions. According to (Grissom & Bartanen, 2019) the following are some strategies that can be carried out by school principals in educational institutions: managing Making a strategic plan: The principal must make a clear and directed strategic plan for the educational institution. This strategic plan must include the vision. mission, goals and objectives of the educational institution as well as the concrete steps that must be taken to achieve them.

Therefore, establish to relations with all parties, the school principal must establish good relations with all parties related to educational institutions, such as teachers, students, parents, teacher councils, and the local government. According to Fishel (2019) school principals must also be able to foster good cooperation with other educational institutions in their area. Developing staff and teachers Principals must develop educational institution staff and teachers through training, mentoring, and performance evaluation. Principals

must also encourage and provide support to teachers to continue learning and developing themselves in order to provide quality learning, apply technology and innovation. Principals must apply technology and innovation in learning and management of educational institutions. Principals must continue to update and develop relevant and effective technologies and innovations to improve the quality of education. Likewise according Chehdimae (2022)managing resources efficiently. **Principals** must manage available resources, such as budgets, facilities and equipment, efficiently and effectively. According to Netolicky (2020) Principals must ensure that all resources are used optimally to support the goals and objectives of educational institutions, provide a safe environment Principals must provide a safe and conducive environment for all parties related to educational institutions. Also according to Day & Sammons (2020) Principals must ensure the safety and comfort of the learning environment so that students and teachers can focus on learning, evaluate and improve. **Principals** must conduct regular evaluations to monitor the performance of educational institutions and identify areas of improvement. Principals must take necessary corrective actions to improve the quality of education and management of educational institutions. By implementing the above strategies, school principals can lead educational institutions effectively and efficiently so that they can provide quality and relevant education for students (Tingle et al., 2019).

The role of the principal is very important in building effective education management in the school environment. Principals as leaders in schools have

broad duties and responsibilities in ensuring that the learning development process of students goes well. For this reason, school principals need to have the ability to build and manage effective and efficient education management. However, in several school environments, there are problems in the implementation of education management, a lack of such as coordination and communication between school principals and teaching staff, the absence of systematic planning evaluation, and a lack understanding of the importance of education management. These problems can negatively impact the quality of student learning and development. Therefore, there is a need for in-depth research regarding the background of the role of the principal in building education management in the school environment. This research can discuss (1) the factors that influence the role of school principals in building effective education management. (2) strategies and best practices that can be used by school principals improve education

management in the school environment. Thus, it is hoped that the results of this research can help optimize the role of school principals in building effective education management and contribute to improving the quality of education in schools.

RESEARCH METHODOLOGY

The Library Research Management (LRM) research methodology is a type of research methodology used in research in the field of education management (Mishra & Alok, 2020) . LRM emphasizes the use of library resources as a data source in research. Research using the LRM methodology usually involves collecting data from various types of library sources such as books, journals, reports, and other sources. In the LRM methodology, the use of library resources has the advantage of saving costs and time in collecting data. However, it should be noted that research results may be affected by limited data sources and the relevance of the data used. Therefore, researchers need to pay attention to the quality of the data

sources used and look at several data sources before concluding the research results.

The following are general steps for using the LRM research methodology:

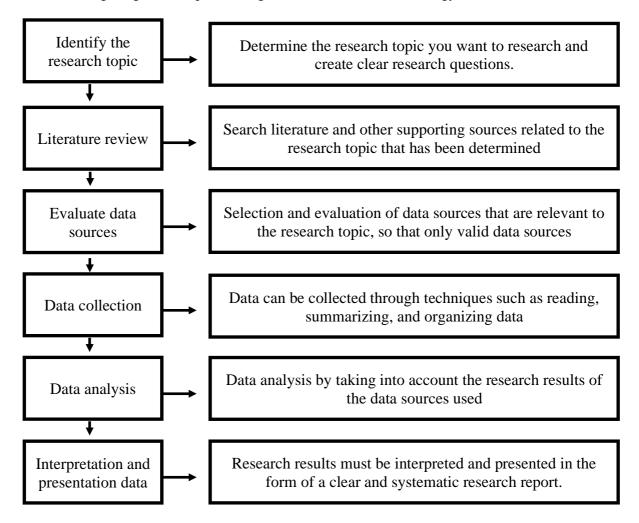


Figure 1. Research Steps Library Research Management (LMR)

RESEARCH RESULTThe Role of the Principal

There are many studies that have been conducted regarding the role of school principals in shaping and building education management in the school environment. Some of the results of these studies include. According to research conducted by Bakhruddin, (2021) at a high school in East Java, the principal has a very important role in building education management in schools. The

principal must be able to develop a clear school vision and mission and set realistic goals and targets to achieve. Research conducted by Fadla et al., (2021) in a junior high school in North Sumatra shows that school principals must be able to lead and coordinate all activities within the school environment, including managing human resources, finances, and infrastructure. In addition, school principals must also be able to provide direction and motivation to

teachers and school staff in improving the quality of education. Research conducted by Kurniawati, (2019) at an elementary school in West Java shows that school principals must be able to build a positive work culture in the school environment. The principal must be able to facilitate dialogue and discussion between teachers and school staff to reach an agreement in making the best decision for the benefit of the school. From the results of this study, it can be concluded that the role of the principal in shaping and building educational management in the school environment is very important because the principal must be able to lead and coordinate all activities in the school, build a positive work culture, and develop a clear school vision and mission to achieve the set goals and targets.

There are several research results regarding the strategy of school educational principals in building management in the school environment, including according to research conducted by Gates et al., (2019), one effective strategy is to conduct coaching development of teacher professionalism and the principal must be able to provide training and development to teachers to improve competence and quality of education in schools. Research conducted by Pellegrini et al., (2020) shows that school principals can use innovative and creative learning strategies increasing student in motivation and interest in learning. This strategy includes the use of technology, developing an interesting curriculum, and implementing collaborative learning. According to research conducted by Knight et al., (2020), the principal's strategy in building education management in the school environment includes building a conducive school culture and the principal must be able to create comfortable and safe environment for students and teachers, encourage active participation. students in school activities. Research conducted by Argyres et al., (2020) shows that an effective strategy is to regularly monitor and evaluate programs and activities in schools. This can help the school principal to know the progress that has been achieved and evaluate the programs that have been carried out so that they can make the right decisions in improving programs that are less effective.

From the results of this study, it can be concluded that there are several effective strategies in building educational management in the school environment carried out by school principals. This strategy includes and teacher fostering developing professionalism, using innovative and creative learning strategies, building a conducive school culture, and monitoring and evaluating regularly on programs and activities in schools. The principal needs to choose a strategy that fits the needs and characteristics of the school to achieve the goals that have been set.

The Role of Principals in Europe

There is a lot of research on the role of school principals in building education management in European schools. Some of the results of these studies include: According to research conducted by Wermke et al. (2023) in Germany, school principals have a very important role in improving the quality of education in schools because school principals must be able to manage human, financial and infrastructure resources in schools and facilitate collaboration between teachers and school staff. Research conducted by De Jong et al., (2022) in the Netherlands shows that school principals must be able

to develop appropriate strategies to increase student motivation and interest in learning, these strategies include developing an attractive curriculum, using technology in learning, and applying learning methods innovative. Research conducted by Antoci et al., (2022) in Romania shows that school principals must be able to build good and effective relationships with parents of students and the surrounding community. The principal must also be able to facilitate the active participation of students and parents in school activities. According to research conducted by Seraphin et al., (2022) in Romania, an effective school principal's strategy is to periodically evaluate and assess the performance of teachers and school staff. This can help principals to know the strengths and weaknesses of teachers and school staff and provide the necessary feedback to improve their performance.

From the results of this study, it can be concluded that the role of school principals in building educational management in European schools has different characteristics and challenges. However, in general, school principals must be able to manage human resources, finance, and infrastructure in schools, develop appropriate learning strategies, build good relationships with students' parents and the surrounding community, and evaluate and assess the performance of teachers and staff. school. The principal needs to choose the right strategy and according the characteristics and needs of the school to achieve the goals that have been set.

The Role of Education Management in Indonesia

Education management has a very important role in the school environment in Indonesia. Educational management

involves planning, organizing, directing and supervising the management of human resources, physical resources and financial resources in schools. The following are some of the important roles of education management in the school environment in Indonesia. According to Anselm (2022) education management strategic planning assists schools in formulating long-term goals strategies to improve the quality of education, this being education management also helps schools to make tactical and operational plans to achieve these goals. Meanwhile, according to Sa'divah et al (2022) organizing education management assists schools in organizing human resources, physical resources, and financial resources in schools. This includes setting up the school's organizational structure and the division of tasks and responsibilities. Apart from that, according to Riani (2022) Education Management Briefing assists schools in providing direction and motivation to staff and students. This includes providing guidance direction to teachers in teaching and learning as well as providing encouragement to students to study well. And finally, according to Susanto & Kumar (2022), Educational Management Supervision assists schools in monitoring and evaluating activities in schools to ensure that the goals and objectives that have been set are achieved. This also includes evaluating the performance of teachers and school staff, as well as overseeing school finances. Overall, education management has a very important role in the school environment in Indonesia. With effective education management, schools can achieve the goals and objectives that have been set and improve the quality of education.

There are many studies that have been conducted regarding the role of education management in the school environment in Indonesia. Following are some related research results: According to Elfrianto & Tanjung (2022) that education management has a very important role in improving the quality of education in Indonesia. This study found that good education management can increase student motivation, improve teaching quality, and increase school organizational effectiveness. Furthermore, Elfrianto & Tanjung (2022) found that good education management can increase parental participation in their children's education. This can be achieved by providing clear and regular information about activities in schools and facilitating dialogue between parents and teachers. Research conducted by Trinova et al., (2022) shows that good education management can improve teacher performance in schools. This can be achieved by providing proper support and training to teachers and setting up a good monitoring and evaluation system. Research conducted by Rostini et al.. (2022) found that effective education management can increase student satisfaction with school. This can be achieved by ensuring the availability of sufficient resources, such as textbooks, facilities and school supplies, and improving the quality of teaching and learning in the classroom. From the results of this study, it can be concluded that education management has a very important role in improving the quality of education in Indonesia. With effective education management, schools can achieve the goals and objectives that have been set and improve the quality of education.

Factors that are principals in building management

Based on the results of research conducted by researchers, there are several factors that influence the role of school principals in building effective education management, according to Yang (2022) including: (1) Competence of school principals: Competence of school principals in understanding current issues in the field education, and effective managerial skills. educational leadership greatly affect the ability of school principals to build effective educational management. (2) Transformational leadership: Principals who are able to encourage teachers and education staff to improve performance by actively motivating, inspiring, and supporting have a significant role in building effective education management. (3) Parental and community involvement: Parental and community involvement very important in building effective education management and school principals must be able to establish good communication with parents and the community to gain their support in managing and improving the quality of education. (4) Quality of human resources: Principals need to ensure that human resources in schools, including teachers and education staff, are of sufficient quality and continue to improve in order to provide quality education.

According to Ogunsanya et al., (2022) revealed that clear policies and regulations make it necessary for the principal to ensure that the policies and regulations implemented in the school are in accordance with the existing needs and conditions. Likewise, according to Reid (2022) reveals that the principal must also be able to explain these policies and regulations clearly to all parties

involved in education. then the availability and use of information technology and the principal needs to ensure that information technology is available and used optimally in schools. to improve the quality of education and effective education management. Good financial management School principals must be able to manage school finances properly to ensure that available funds are used effectively and efficiently in accordance with the desired educational goals. In conclusion, the principal plays a very important role in building effective education management. Principals must have good competence, leadership and managerial skills, and pay attention to other factors that affect the quality of education in schools.

Research on the role of school principals in improving the quality of school management has been carried out by various researchers in various countries. The results of this study indicate that quality and effective school principals have a very important role in shaping the culture and atmosphere in schools, as well as ensuring that school management runs well. Several research results show that school principals who have good managerial skills are able to lead schools effectively and encourage the development of staff and students. In addition, school principals who are communicative, have clear policies, and respect staff and students are also considered to be able to improve overall school management. However, other factors such as support from government, sufficient budget, parental involvement also play important role in improving the quality of school management. Therefore, although effective school principals can play an important role, improving management to be more holistic and

sustainable requires cooperation and support from various parties.

Principal's Strategy in Improving Education Management

There are several strategies and best practices that school principals can use to improve education management in the school environment. According to Meyer et al., (2022) they are as follows:

- 1. Prioritize teacher professional development: **Principals** can improve education management in their schools by ensuring that all teachers in their schools attend ongoing professional development programs. The program can be in the form of training, workshops, or mentoring. In this way, teachers will continue to improve their skills and knowledge, which will ultimately improve the quality of teaching.
- 2. Strengthening relationships with parents of students: Principals can improve management of education in the school environment by strengthening relationships with parents of students. The principal can hold regular meetings with parents, send information about school activities, and involve them in making important decisions related to the school.
- 3. Implementing technology: Principals can improve education management in the school environment introducing by technology in the teaching and administration process. example, implementing by applications and software that can help organize and manage schoolrelated information, such as student information, class schedules, and attendance records.

- 4. Improving leadership effectiveness: Principals can improve educational management in the school environment by increasing leadership effectiveness. An effective principal must have the ability to lead and manage a team, make the right decisions, and motivate students and teachers to achieve the best results.
- 5. Measuring performance: Principals can improve education management in the school environment by regularly measuring the performance of students and teachers. In this way, the principal can determine whether the teaching program has been successful and whether improvements are needed in the future.

By implementing the strategies and best practices above, school principals can improve education management in the school environment and help students achieve the best results in the learning process.

Likewise according to Mogas et al., (2022) states that school principals have an important role in improving education management in schools. Some of the actions that are usually taken by school principals to improve education management in schools are:

- Make a work plan: The principal can make a clear and structured work plan to achieve the educational goals that have been set.
- 2. Lead by example: Principals must be role models for staff and students, by demonstrating a positive attitude and taking actions that are consistent with the educational values espoused by the school.
- Develop staff skills: Principals can help improve education management in schools by

- providing training and skills development for staff.
- 4. Improving relationships with students' parents: Principals can improve education management in schools by building positive relationships with parents, including involving them in the education process.
- 5. Using technology: Principals can improve education management in schools by using the right technology, such as school management software, to help manage student and staff data.

However, efforts to improve education management in schools are not only the responsibility of the school principal, but are a joint effort between the principal, staff and parents of students.

DISCUSSION

Definition of Education Management

Educational management is an organized and directed management in order to achieve educational goals. Educational management involves managing and using resources to achieve educational goals and objectives. The education management approach covers several aspects, including planning, organizing, directing, controlling, and supervising. All of these aspects aim to achieve efficiency and effectiveness in the administration of education. Several management theories relevant educational management include: Classical theory: This theory emphasizes the role of managers as regulators and supervisors to achieve efficiency and productivity. This approach is suitable for educational management centered on well-organized organizational structure. Systems Theory: This theory views the organization as an interrelated

system. Education management must pay attention to aspects that interact with each other in the education system. Contingency Theory: This theory emphasizes different management approaches depending on the conditions prevailing in the environment. This means that educational management must adapt to a changing environment. Transformational Theory: This theory emphasizes the role of the leader as a driving force to achieve positive change. Educational leaders must be able to motivate, inspire, and provide direction to achieve educational goals (Mogas et al., 2022). Based on the description above, it can be concluded that in education management, it is important to consider several aspects such as planning and budgeting, human resources, and selecting appropriate teaching methods. Good education management can help create a productive and effective educational environment for students and teaching staff.

Educational management complex and important field in the world of education. According to Nehez & Blossing (2022) explains several experts and experts in education management as follows the opinion of experts in Europe about education management: Peter Drucker is a management professor from Austria who has a major influence in the field of management and organization. He argued that education management is the process of regulating and supervising educational organizations in order to achieve the stated goals effectively and efficiently. Christopher Hodgkinson, an education management expert from education England, said that management is a continuous process of planning, organizing, monitoring and evaluating order educational goals effectively. Hans JH Bergmann, an education management expert from Germany, argued that education management is a complex process and includes all activities carried out to regulate and supervise the effective use of educational resources. Brian J. Caldwell, an education management expert from Australia, said that education management is a process that involves three main things, namely management of educational resources, the development of effective educational programs, and the supervision and assessment of the educational outcomes achieved. Andy Hargreaves, an education management expert from England, stated that education management should focus more on developing the quality of education rather than only considering bureaucratic or administrative factors. He stressed the importance of prioritizing the quality of education and paying attention to the interests of students in the education management process.

Definition of Education in Schools

Education in schools is a formal learning process carried out in school education institutions, which is designed to help students acquire the knowledge, skills, and values needed to become productive members of society and make positive contributions. Education in schools covers various fields of study, such as mathematics, science, history, languages, arts, and sports, and usually lasts for 12 years starting from Elementary School, Junior High School, and Senior High School or Vocational High School in Indonesia. Education in schools also has the goal of shaping students' character, teaching moral values, and helping students develop the social skills and life skills needed to be successful in life. In addition, education in schools also has a role in shaping

students' personalities, creating a safe and supportive environment for students to learn, and teaching students to think critically and creatively (Subakti et al., 2022).

Definition of Principal

principal the is person responsible for the management and management of a school. The Principal has the duty and responsibility to ensure that school operations run well and achieve the goals set. The principal's duties include supervising teaching staff and employees, planning curriculum and school activities, managing the budget, leading meetings and gatherings, and establishing good relations with parents, the community, and other relevant parties. The Principal also plays an important role in fostering developing a school culture that is conducive to the teaching and learning process, as well as ensuring the safety and welfare of all school members.

As a school principal, several tasks that are usually carried out in building good education management according to Sturrock (2022) include:

- Establishing the vision and mission of the school: The principal must determine the vision and mission of the school, which must align with the direction of national education and the needs of the local community.
- 2. Develop school programs:

 Principals are responsible for developing school programs that are in line with the vision and mission, as well as coordinating curriculum development and extracurricular activities.
- 3. Fostering and developing staff: Principals are responsible for

- coaching and developing teaching staff and employees, including conducting performance evaluations, providing training, and providing the necessary support.
- 4. Fostering relationships with students' parents: Principals must maintain good relationships with parents, including providing information about student development and school policies.
- 5. Managing the school budget: The principal is responsible for managing the school budget properly, including making a budget plan, monitoring expenses, and reporting regular use of the budget.
- Maintain student discipline: The principal must ensure student discipline in the school and provide appropriate sanctions where necessary.
- 7. Maintaining relationships with the community: Principals must maintain good relations with the community, including with educational institutions, the government, and local community organizations.
- 8. Maintain security and safety in schools: Principals must ensure the safety and security of students and employees in schools, including developing contingency plans if necessary.
- Maintain school documentation and records: The principal is responsible for maintaining school records and records, including student academic records, staff performance reports, and other administrative documents.
- 10. Solving problems at school:

 Principals must be prepared to deal
 with problems at school, such as
 disciplinary problems, conflicts

between students, or other administrative problems.

Based on the description above, it can be concluded that the principal has a very important role in managing a school. Principals are responsible for making strategic decisions in improving the quality of education, managing school finances, leading staff and students, building relationships with the community and parents, and maintaining the safety and well-being of everyone associated with the school. An effective principal must have strong leadership skills, the ability to make the right decisions, and good communication. The principal must also ensure that teachers and school staff work effectively, and show concern and concern for students. In today's digital era, a school principal must also understand technology and be able to integrate it into the learning process. Principals must ensure that students are equipped with the necessary skills to live in an increasingly digital world. By managing schools effectively, principals can help students achieve academic achievement and prepare them for a successful future.

CONCLUSION

The principal has a very important role in shaping and building education management in the school environment. As a leader in a school, the principal must be able to lead and manage various aspects of education, including education management. This is very important to help teachers, staff, and students understand the goals and direction of the school, and build enthusiasm and motivation to achieve goals. Then also must be able to form and lead a solid work team in the school environment. In education management, school principals must be able to identify the needs and

tasks that must be carried out, then assign clear tasks and responsibilities to each team member. In this case, the principal must also ensure that each team member has sufficient skills and knowledge to carry out the assigned tasks. As well as building a good school culture based on positive values, such as cooperation, simplicity, honesty, responsibility, and loyalty. The Principal must ensure that these values are applied in everyday life in the school environment, both by teachers, staff and students.

REFRENCES

Argyres, NS, De Massis, A., Foss, NJ, Frattini, F., Jones, G., & Silverman, BS (2020). History - informed strategy research: The promise of history and historical research methods in advancing strategy scholarship. *Strategic Management Journal*, 41 (3), 343-368.

Antoci, L., & Ceobanu, C. (2022). The Influence of Schools' Principal Management Profile on Students'

Achievement. *Educatia* 21, (22), 5-14.

Anselmus Dami, Z., Budi Wiyono, B., Imron, A., Burhanuddin, B., Supriyanto, A., & Daliman, M. (2022). Principal self-efficacy for instructional leadership in the perspective of principal strengthening training: work engagement, job satisfaction and motivation to leave. *Cogent Education*, 9 (1), 2064407.

Bragg, LA, Walsh, C., & Heyeres, M. (2021). Successful design and delivery of online professional development for teachers: A

- systematic review of the literature. *Computers* & & *Education*, 166, 104158.
- Bakhruddin, M. (2021). The Role of the Principal in Empowering Educators. *Education*, *Learning*, *and Islamic Journal*, 3 (2), 48-79.
- Churiyah, M., Sholikhan, S., Filianti, F., & Sakdiyyah, DA (2020). Indonesia education readiness conducting distance learning in Covid-19 pandemic situation. International Journal of Multicultural and Multireligious Understanding , 7 (6), 491-507.
- Chehdimae, H., & Ali, HM (2022).

 Leadership Practices among
 Islamic Private Secondary
 School Principals in Southern
 Thailand: Validating a Model
 of Strategic Educational
 Leadership. IIUM Journal of
 Educational Studies, 10 (2),
 81-105.
- Day, C., Sammons, P., & Gorgen, K. (2020). Successful School Leadership. *Education development trust*.
- De Jong, WA, Lockhorst, D., de Kleijn, RA, Noordegraaf, M., & van Tartwijk, JWF (2022). Leadership practices in collaborative innovation: A study among Dutch school principals. Educational Management Administration & Leadership, 50 (6), 928-944.
- Elfrianto, E., & Tanjung, BN (2022).

 Utilization of Learning On Line
 Course in Perspective
 Education
 Management. International
 Journal of Social and

- Management Studies, 3 (6), 48-57.
- Fedorenko, E., Velychko, V., Stopkin, A., Chorna, A., & Soloviev, V. (2019). Informatization of education as a pledge of the existence and development of a modern higher education.
- Fishel, JT (2019). The principle of unity of effort: A strategy for conflict management. in *Managing Contemporary Conflict* (pp. 175-189). Routledge.
- Fadla, SL, Nasution, I., Ramadani, S., Situmorang, HSB, & Maqfiroh, L. (2021). The Role of the Principal in Learning Management at Hidayatullah Private Madrasah Ibtidaiyah Batang Quiz North Sumatra Medan. *Journal of Islamic Education*, 5 (2), 17-34.
- Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). COVID-19 and remote learning: Experiences of parents with children during the pandemic. *American Journal of Qualitative Research*, 4 (3), 45-65.
- Grissom, JA, & Bartanen, B. (2019).

 Strategic retention: Principal effectiveness and teacher turnover in multiple-measure teacher evaluation systems. *American Educational Research Journal*, 56 (2), 514-555.
- Gates, SM, Baird, MD, Master, BK, & Chavez-Herrerias, ER (2019). Principal Pipelines: A Feasible, Affordable, and Effective Way for Districts to Improve Schools. Research Reports. RR-2666-WF . RAND Corporation. PO Box 2138,

- Santa Monica, CA 90407-2138.
- Hartanti, LPS, Gunawan, I., Mulyana, IJ, & Herwinarso, H. (2022). Identification of waste based on lean principles as the way towards sustainability of a higher education institution: A case study from Indonesia. Sustainability , 14 (7), 4348.
- Kurniawati, I. (2019). Socialization of Management of School Operational Assistance Funds (BOS) at SMP Negeri 1 Tikung Lamongan. *Journal of Science and Technology Community Service*, 5 (2), 195-199.
- Knight, E., Daymond, J., & Paroutis, S. (2020). Design-led strategy: how to bring design thinking into the art of strategic management. *California Management Review*, 62 (2), 30-52.
- Mishra, SB, & Alok, S. (2022). Handbook of research methodology.
- Meyer, A., Hartung-Beck, V., Gronostaj, A., Krüger, S., & Richter, D. (2022). How can principal leadership practices promote collaboration teacher and organizational change? longitudinal multiple case study of three school improvement initiatives. Journal of Educational Change, 1-31.
- Mogas, J., Palau, R., Fuentes, M., & Cebrián, G. (2022). Smart schools on the way: How school principals from Catalonia approach the future of education within the fourth industrial revolution. *Learning*

- Environments Research , 25 (3), 875-893.
- Netolicky, DM (2020). School leadership during a pandemic: navigating tensions. *Journal of Professional Capital and Community*, 5 (3/4), 391-395.
- Nehez, J., & Blossing, U. (2022).

 Practices in different school cultures and principals' improvement work. International Journal of Leadership in Education, 25 (2), 310-330.
- Ordóñez-Sierra, R., Rodríguez-Gallego, M., & López-Martínez, A. (2020). School management from the voice of their protagonists in Spain. *Revista Colombiana de Educación*, (79), 301-324.
- Ogunsanya, OA, Aigbavboa, CO, Thwala, DW, & Edwards, DJ (2022). Barriers to sustainable procurement in the Nigerian construction industry: an exploratory factor analysis. International Journal of Construction Management, 22 (5), 861-872.
- Pellegrini, MM, Ciampi, F., Marzi, G., & Orlando, B. (2020). The relationship between knowledge management and leadership: mapping the field and providing future research avenues. *Journal of Knowledge Management*, 24 (6), 1445-1492.
- Riani, SS, & Ain, SQ (2022). The role of school principal in implementing education quality management. *Elementary School Scientific Journal*, 6 (2), 204-211.

- Rostini, D., Syam, RZA, & Achmad, W. (2022). The Significance of Principal Management on Teacher Performance and Quality of Learning. *Al-Ishlah:*Journal of Education, 14 (2), 2513-2520.
- Reid, DB (2022). Suppressing and sharing: How school principals manage stress and anxiety during COVID-19. School Leadership & Management, 42 (1), 62-78.
- Shaturaev, J. (2021). 2045: Path to the nation's golden age (Indonesia Policies and Management of Education). *Science* and Education, 2 (12), 866-875.
- Sweller, J. (2020). Cognitive load theory and educational technology. Educational Technology Research and Development, 68 (1), 1-16.
- Sa'diyah, M., Nurhayati, I., Endri, E., Supriadi, D., & Afrianto, Y. (2022). The implementation of independent learning independent campus: The new paradigm of education in Indonesia.
- Susanto, E., & Kumar, KS (2022). Duties and Responsibilities of Educational Management. PPSDP International Journal of Education, 1 (1), 17-42.
- Seraphin, H., Smith, SM, Ghidouche, F., & Nechoud, L. (2022). The Principles for Responsible Management Education and Responsible Tourism Strategies: Success, Failure or Trauma for Generation Z?. in Children in Sustainable and

- Responsible Tourism . Emerald Publishing Limited.
- Subakti, H., Harianja, JK, Ogara, DO, Arni, Y., Fauzi, A., & Simarmata, J. (2022). Educational Foundation . Our Writing Foundation.
- Sturrock, S. (2022). Primary teachers' experiences of neo-liberal education reform in England: 'Nothing is ever good enough'. *Research Papers in Education*, 37 (6), 1214-1240.
- Tingle, E., Corrales, A., & Peters, M.L. (2019). Leadership development programs: Investing in school principals. *Educational Studies* , 45 (1), 1-16.
- Trinova, Z., Iskandar, A., Fathurrochman, I., Damayanto, A., & Fatmawati, E. (2022). Islamic boarding school education leadership supporting face to face learning during the pandemic period in Indonesia. Journal of Igra': Educational Studies, 7 (1), 14-31.
- Wermke, W., Nordholm, D., Anderson, AI, & Kotavuopio-Olsson, R. (2023). Deconstructing autonomy: The case of principals in the North of Europe. European Educational Research Journal, 14749041221138626.
- Yang, F., & Goh, YM (2022). VR and MR technology for safety management education: An authentic learning approach. *safety science*, 148, 105645.