



Performance Appraisal Model of Integrated School Principals in Disruptive Era: A Case Study of Public High Schools in Surabaya

Mamik Suparmi^{1*}, Pribadiyono², Suwitho³

Human Resource Management, Postgraduate Program, Sekolah Tinggi Ilmu Ekonomi
Indonesia, Surabaya, Indonesia

E-mail: mamiksuparmi69@gmail.com¹

(Received: October-2023; **Reviewed:** October-2023; **Accepted:** November-2023;

Available Online: November-2023; **Published:** November-2023)

ABSTRACT

This study aimed to develop an integrated principal performance appraisal model in the disruption era to evaluate the junior high school principal's performance in Surabaya. The study used a research and development research design with a qualitative research approach. There were two stages undertaken namely the research stage aimed at exploring potentials and problems and analyzing the needs required in developing the appraisal model and the development stage aimed at developing a complete appraisal model along with a performance assessment tool and a performance e-report card. The performance appraisal model was developed following Sugiyono Model Level 1's developmental research. The results of the development were in the form of a prototype model for evaluating the performance of school principals in the form of dimensions of performance targets and work behavior. The dimensions of the performance targets included the dimensions of Principal Leadership, Principal Technology Leadership, Implementation of Main Tasks, School Achievement, Personal Achievement, Civil Servant Discipline. The validation results of the performance target and work behavior instruments were valid, reliable, and very good. The developed prototype model was carried out in a limited trial on school principals, supervisors, and education experts. The result of the feasibility test for the entire principal performance appraisal prototype model was categorized very feasible and could be used to assess the performance of school principals.

Keywords: Performance appraisal; principal; disruption.

INTRODUCTION

Digital technology is currently disrupting the educational landscape, and the post-pandemic Covid-19 predicament is what's causing this transition to accelerate (Lim & Teoh, 2021). Distance learning, both online and offline, has drastically impacted the learning process from face-to-face instruction (Lisi, 2021). The use of information technology in the classroom is a requirement of this condition for school administrators, teachers, and students (Pittman et al., 2021; Baglama, 2022). The field of education has encountered significant challenges in the

digital age (Putra et al., 2023). The success of educational institutions depends on their capacity to innovate and overcome obstacles (Putra et al., 2023). As a result, the principal's leadership style needs to change (Rosita & Iskandar, 2022).

School administrators now play a new role in the age of technological disruption namely leading their institutions' adoption of ICT-based learning. A leader that can change effectively, swiftly, creatively, and highly while also comprehending digital technologies is required for this situation (Nababan et al., 2021). Even while the leadership abilities of school principals have an impact on the caliber of learning. The findings of AusAID's research reveal that the competence of school principals is still inadequate, particularly in the use of information and communication technology for learning. The five pillars of management pillars, integrity, public leadership, information and communication technology pillars, and dynamic futurist pillars are thus necessary for performance (Fitriyah & Santosa, 2020). Principals must be able to read the latest developments and take policies with a leadership approach (Ridho et al., 2023).

A successful school depends on strong principal leadership. People will frequently claim that the principal's performance is the secret to success in schools that go on to become the community's idols (Andini, 2021). The principal's abilities play a significant role in the success of the school (Antonopoulou et al., 2020). The effectiveness of the principal's leadership as a factor or indicator of the realization of school quality (Bronlow, 2018). The success and ongoing system improvement depend heavily on the principal's performance as a leader. The wisest decisions for resolving issues in a school are often made by the principal. This has a significant impact on how the school and its stakeholders run. For instance, a school administrator who views educational technological advancements like artificial intelligence (AI) as something to be shunned will cause the institution to fail to society 5.0. As a result, schools won't advance, and pupils in particular won't comprehend what artificial intelligence is or how to use it with appropriate attitudes.

A school principal's performance management must be evaluated because of the significance of the aforementioned function. The goal of performance management is to increase organizational performance. Employee actions and outputs are in line with company objectives thanks to performance management and a manager's procedure. The key to gaining a competitive advantage is performance management (Cieminski, 2018). Individual performance appraisals are one type of performance management. Management uses the performance appraisal method to assess employee performance over a predetermined time period, offer comments, and support workers so that everyone may become more productive (Altun & Sarkaya, 2022). A leader's traits and abilities determine their behavior and power, which in turn interact with situational and interventional factors outside of their control and ultimately impact how well they execute (Buckman & Sloan, 2022). Performance evaluations also involve developing criteria that can be repeatedly met and quantified from each employee's job description and setting goals and evaluating results (Buckman & Sloan, 2022). In performance evaluation, it is important to remember that technical, social, conceptual, and managerial skills are more important than personal issues.

This assessment should be carried out in an organized manner and in accordance with the features of performance appraisal, one of which is the 360-degree assessment approach. In a 360-degree feedback system, employees' varied behaviors or talents are assessed by their supervisors, peers, clients, and even themselves (Altun & Sarkaya, 2022). The findings of a 360-degree feedback system demonstrate how managers are evaluated on each issue (Buckman & Sloan, 2022; Altun & Sarkaya, 2022). The procedure by which an employee learns about how he is judged by a group of people with whom he regularly interacts at work is known as the 360-degree assessment method. The 360-degree assessment is sometimes referred to as multisource evaluation, multirater assessment, and multisource assessment (Merritt & Wang, 2022). 360-

degrees refers to full circle degrees with the employee at the center, and assessment comes from all around the employee. While the evaluation tool serves as a frame of reference for the intended work behavior, the use of the concept of 360-degree assessment aims to assist people in making positive adjustments and changes.

However, a number of issues were discovered when the performance evaluation of the principal of a public junior high school in Surabaya was put into practice. First off, there is no instrument for measuring school principal performance that can accurately reflect the actual circumstances of principal performance. This is quite regrettable given the significance of assessing and monitoring school principals' work in order to preserve the caliber of the institutions they oversee. The credibility of school principals cannot be taken into account in sustaining and enhancing school quality because the promotion of school principals is not done based on performance evaluation. Additionally, the performance evaluation findings were not taken into account when changing school principals. As a result, the distribution of school principals is out of alignment with educational requirements and standards. Third, without taking into account the principal's performance, periodization is exclusively dependent on the principal's term.

Given the importance of evaluating school principal performance, the creation of measures for evaluating school principal performance is critical. Instrument development must adhere to certain rules, one of which is that it must be relevant, which means that the characteristics measured in performance appraisal are related to the work results accomplished and carried out comprehensively (Aruldoss et al., 2021). As a result, the purpose of this research is to create an instrument for assessing the performance of school principals in the Surabaya City Education Office while taking into account some of the existing field constraints. This instrument will constitute the research's uniqueness, and it is predicted to be both theoretically and practically beneficial. Theoretically, the outcomes of the construction of this instrument are intended to contribute to the development of research instruments, namely the assessment of performance management in educational contexts. Additionally, it is intended that the findings of this study would practically aid in the supply of school principal performance appraisal tools pertinent to the circumstances in the Surabaya City Education Office, as one of the metropolitan areas with a high emphasis on education.

Performance Appraisal with 360-degree Assessment Method

Performance appraisal is a system used by management to analyze individual performance over a specific time period, provide feedback, and encourage individuals so that each individual can improve their performance (Alsuwaidi et al., 2021; Farida, 2021). The measurement process that can take into account assessment methodologies is the main emphasis of performance appraisal (Fauzi & Herminingsih, 2021). Performance is the extent to which tasks are completed successfully and the capacity to meet objectives (Luthans et al., 2021). If the desired goals can be properly attained, performance is deemed successful (Armstrong & Taylor, 2020). Performance evaluation is the process of comparing a leader's present or prior performance against predetermined performance standards (Uno & Nina Lamatenggo, 2022). The value that leaders bring to their businesses is gauged through performance appraisal (Gumus et al., 2022). The most recent trend in performance appraisal for management development is the use of upward and 360-degree assessment to ensure unbiased and effective assessment (Stone et al., 2020). It is very helpful for evaluating Superkeepers, or employees who greatly exceed organizational expectations, and Keepers, or employees who exceed expectations, because different behaviors or skills of employees are evaluated in 360-degree assessment systems not only by subordinates but also by coworkers, customers, superiors, and yourself (Sengupta &

Sengupta, 2018). The evaluation approach makes it easy for management to deliver employee evaluations in the form of decisions on promotions, demotions, transfers, bonuses, training, and providing direction and change (Zondo, 2018).

Principal Performance Appraisal

Performance appraisal of school principals is the process of collecting, processing, analyzing and interpreting data about the quality of the work of school principals in carrying out their main duties as a school leader and as a learning leader in achieving certain predetermined goals namely learning achievement and student growth (Setyawan & Santosa, 2021; Bafadal et al., 2021; Kaye, 2020). In order to build professional principals, it is crucial for superiors to evaluate and provide feedback on the performance of principals (Basham, 2018). Performance evaluations of school principals are completed annually (formative) and every four years (summative). The initial evaluation is performed to identify the principal's assets and liabilities (Bafadal et al., 2021). According to research, formative evaluation that includes a lot of feedback and opportunities to use the input enhances performance and success (Борисенко, 2018). Setting performance standards, comparing actual performance to those goals, and offering feedback on the assessment's findings are all parts of the school principal's performance appraisal process (Kaye, 2020). Before a variable is utilized as a performance benchmark, it must satisfy four criteria: it must be pertinent to the school organization, be reliable and consistent, be able to distinguish across employee performance levels, and be useful.

Principal Leadership in the Era of Digital Technology Disruption

Education is one of the areas that will be disrupted as a result of the advancement of innovation, particularly in digital technologies (Kasali, 2018). To collaborate and carry out tasks with others, educational leadership needs to possess the three key intelligences of professional, interpersonal, and management intelligence (Fahrissi, 2020). The principal must understand his leadership style and character as a strength for his competency (Francis, 2020). According to some research findings, the school principal plays a crucial role in ensuring that schools develop and change, assuring their success and quality, and serving as a catalyst for educational initiatives (Clarke et al., 2023). The school leader of the twenty-first century must be open to shifting their perspectives and behaviors. Leaders in schools in the twenty-first century must also be committed to ongoing professional development and be willing to make improvements. School principals must be included in the transformational leadership model's implementation in the field of education (Sebastian et al., 2019; Darling-Hammond & Oakes, 2021). To address the leadership issue, particularly in the sphere of education, the transformational leadership model must be used. A leader in the digital age needs to possess three skills covering a deep understanding of people, digital organization capabilities, and the ability to dive into and integrate tech trends (Sheninger, 2019). The skills that must be possessed in dealing with future changes are leadership, teamwork, communication, business intelligence, critical thinking, design thinking, innovation, lifelong learning and understanding of technology (Kuratko & Morris, 2018).

METHOD

This study used a research and development design using the Sugiyono Level 1 Model. The study was undertaken for assessing the performance of public junior high school principals in Surabaya. Data were collected using surveys, in-depth interviews, documentation, and Focus

Group Discussions. The informants of this study were junior high school supervisors, heads of state junior high schools, heads of the Surabaya city education office, and mayors or appointed officials, as well as education experts. The informants were selected by purposive sampling technique with judgment sampling type. The obtained data were analyzed qualitatively using an interactive model. The validity test was carried out through an internal validity test using data triangulation techniques.

RESULT AND DISCUSSION

Result

1. Current Condition of the Principal's Performance Appraisal

Although it had been done, Surabaya's performance review of junior high school principals had not adhered to the rules. Direct supervisors who were designated by the head of the Surabaya Education Office and were responsible for conducting performance reviews encountered numerous difficulties. There were issues in comparing the performance of recently appointed principals with veteran principals. There had not been a distinction made between recently appointed principals and those veteran principals in the performance evaluation process.

When it came to using the outcomes of school principals' performance evaluations, it was discovered that the Education Office had not done so in a way that complied with performance management's objectives and functions. An evaluation of performance could not work if a school principal had done a good job or not. School principals had not yet been ranked by the Surabaya Education Office, nor did it even have the tools to do so. Principal performance appraisal was not used by the Surabaya Education Office as a foundation for periodizing school principals. Only depending on the principal's term, the periodization of school principals was conducted. Principals who had served for 3 periods or 12 years were automatically appointed as overseers or supervisors. The Education Office had carried out fostering and developing school principals but not based on the results of performance appraisal. Coaching was done individually or together. Meanwhile, the development of school principals was carried out in the form of training specifically only for school principals. Figure 1 shows the existing principal's performance appraisal.

In connection with the transfer or rotation of school principals, it was found that the mutation or rotation carried out by the Surabaya Education Office was a form of coaching and at the same time developing school principals' leadership skills. However, mutations had been carried out as needed and occasionally due to cases or problems with the school principal where steps had been taken to overcome these problems, one of which was by transferring or rotating the person. Transfers and rotations were not purely based on performance appraisal. Sanctions and awards had not used the results of performance appraisal.

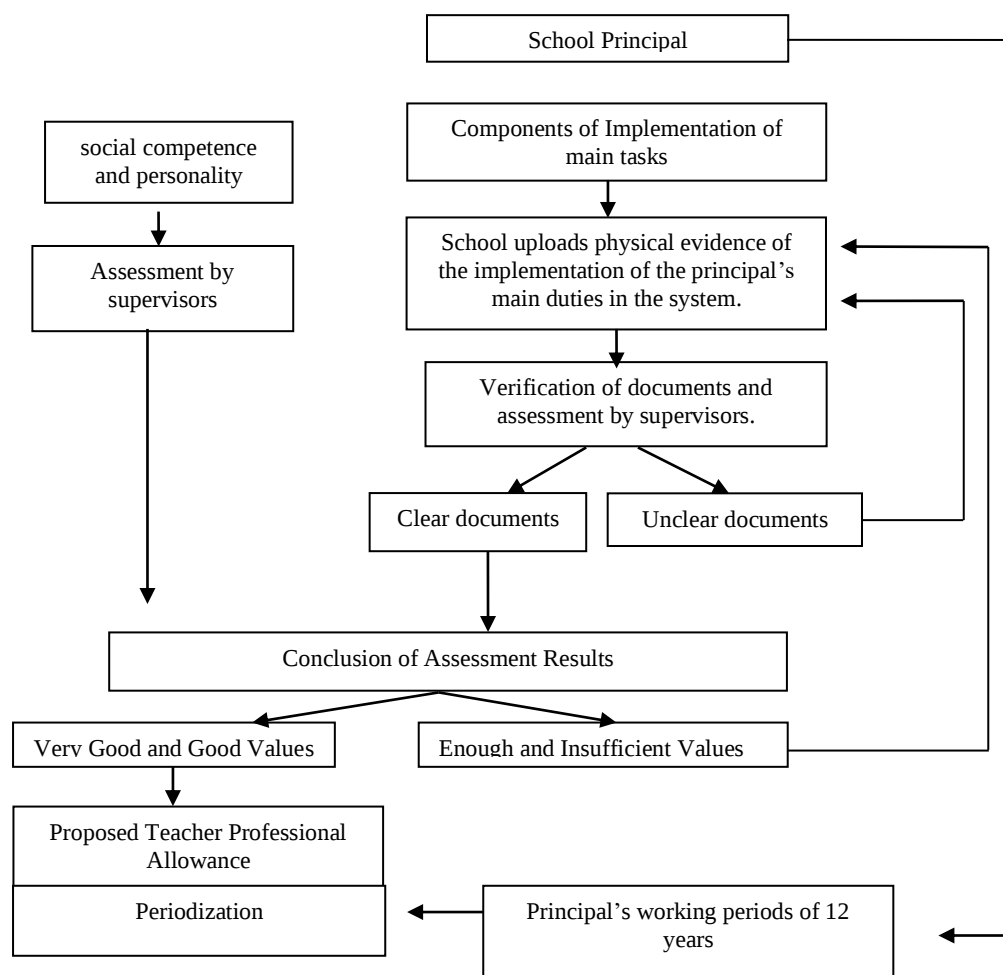


Figure 1. Existing school principal performance appraisal

Principal Performance Appraisal Model Development

The results of the study indicated that there was a need for updating the performance appraisal of current school principals. The update included a performance appraisal tool and appraisal mechanism. The principal performance appraisal prototype model accommodated the need for school principal performance appraisal according to demands in the era of disruption and during the pandemic and after the Covid-19 pandemic. The prototype model set as a result of the development consisted of the dimensions of performance goals and work behavior. The results of the development of the dimensions of performance objectives consisted of six dimensions with a total of 81 components. The dimensions of performance targets consisted of the dimensions of school leadership, technology leadership, implementation of main tasks, school achievement, personal achievements of school principals and civil servant discipline. While the dimensions of work behavior consisted of five work behaviors including service orientation, commitment, work initiative, cooperation and leadership. Each work behavior was translated into seven situations and for each situation questions were developed for 360-degree assessment.

There were two models for the performance evaluation system for the principal of the school. For principals who had only completed their first term, the first model served as a

performance evaluation system (see Figure 2). For school administrators who had been in their positions for at least a year up until the conclusion of the third period, the second model served as a performance evaluation mechanism (see Figure 3). The opinions of every informant were in agreement and supported the model's design. The model for the principal performance appraisal system that was created could be utilized to monitor how the principal's vision and purpose were being carried out as well as serve as a foundation for official policies and decision-making.

The results of the validation of the principal's performance appraisal instrument by the supervisor showed that all of the instruments were feasible. The final results of the instrument feasibility test by five experts showed that all formulations on the six dimensions of the school principal's performance appraisal instrument had a very good final score, were valid and reliable.

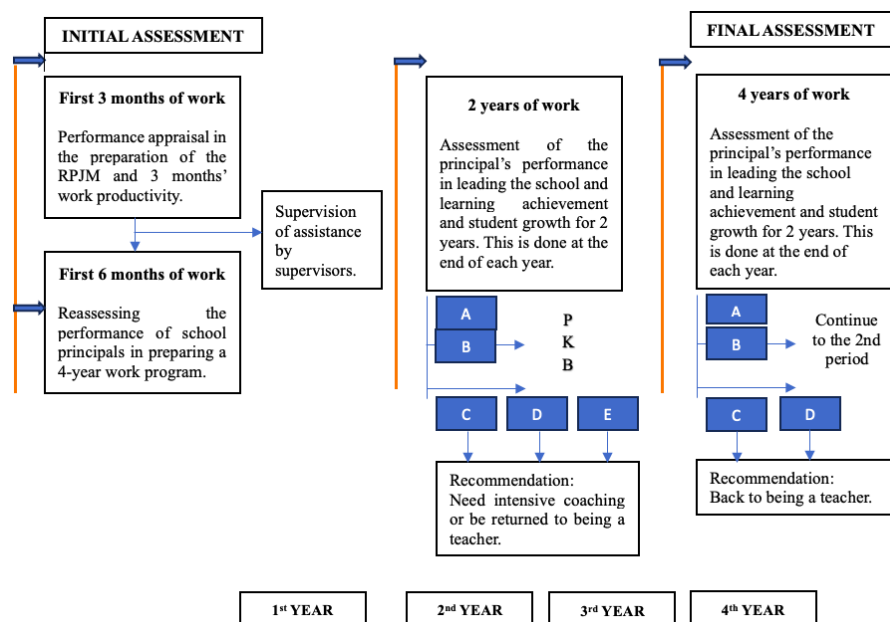


Figure 2. Mechanism of performance appraisal for new school principals up to the first term

The prototype model for evaluating the performance of school principals was found to be practicable according to the results of the feasibility test conducted by five experts. The five experts were questioned informally as part of the feasibility evaluation. Because the model's components were in line with the rules and requirements for leadership that school principals must meet, the assessment findings demonstrated that the prototype model could be utilized to evaluate the leadership competence of school principals. The model could also be utilized as a starting point when school principals were transferred, rotated, or demoted. In addition, it could serve as a foundation for training and developing school principals.

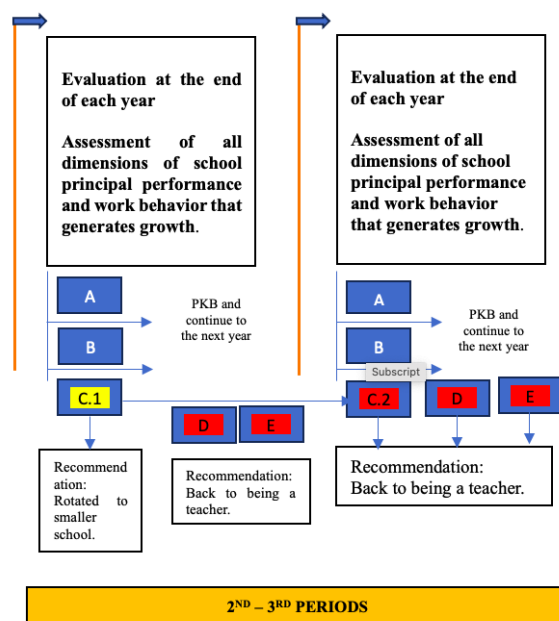


Figure 3. Model of performance appraisal implementation mechanism second-third period principals

In general, the whole prototype model of the school principal performance appraisal as a result of development which had been supplemented with school principal performance reports in the form of e-reports is stated by experts to be usable, very interesting, visibly implemented, good, and can be replicated to other regions and can even become a role model in Indonesia with adjustments in certain areas, being able to photograph the situation in accordance with the real conditions of the school holistically. The expert informants P1 and P2 stated the same ideas.

“Overall, this model is very interesting and implementable. It must be helping local Education Office to monitor and evaluate the works of school principals”. (P1)

“In my opinion, this model is good and can be used in other areas and can become a role model in Indonesia with several adjustments according to each region”. (P2)

Meanwhile, the results of a limited trial of the principal e-report card prototype model conducted on eleven public junior high school heads in the Surabaya Education Office using the percentage of agreement formula (Borich, 1984) were declared reliable.

Discussion

The development of a school principal’s performance appraisal model according to the era of digital technology disruption had a direct or indirect effect on education management that could keep pace with technological changes (Sunarsi et al., 2020). It was necessary to rank the results of the school principal’s performance evaluation (Usman, 2022) and develop instruments to rank them based on the school principal’s performance. This was in line with Keller and Mary’s research that principals’ ratings were important as positive feedback on fairer performance appraisals and affected performance satisfaction (Keller & Meaney, 2018; Moon, 2019).

Principal rankings could improve graduate quality, principal performance, and school performance (Gonzalez, 2023).

The results of the study indicated that an update was needed in the indicators for assessing the performance dimensions of current principals in accordance with the demands of leadership in the era of digital technology disruption. In line with the findings of Tylor (2021) that school principals' performance appraisal standards and indicators were very important as needed by school principals as educational leaders to improve the quality of learning and student achievement. The main objective was to provide human resources and analyze the government's expectations of educational leaders. The change in the role of school principals who had to manage learning not only face-to-face, but also still had to provide online services after the Covid-19 pandemic required school principals to play a role not only as learning leaders, but also to have a new role as a technology leader in schools (Baglama et al., 2022).

The effectiveness of the principal performance was crucial for the success of the school (Hustati, 2019). The motivation of his personnel and the caliber of classroom instruction would be influenced by the principal's performance. The effectiveness of the principal's leadership as a predictor of the realization of school quality (Mulyasa, 2022). The principal's position had gradually changed from one of manager to one of learning leader. The success of a school was significantly influenced by its leadership (Daniëls et al., 2019). In order for all children to learn effectively, school administrators played a crucial role in coordinating all types of factors that existed inside and outside the school (O'Neill Jr & Nalbandian, 2018).

The study's findings demonstrated the necessity of evaluating a school principal's performance in light of his prowess as a technology leader (Musid et al., 2022). A school principal needed to assess his effectiveness and receive assistance in changing his attitudes toward technology (Mohamad, 2022). Instruments must be created to assess the technical leadership skills of school principals. It was important for principals to get more knowledgeable about technology and how it might be used into classrooms. When technology was used properly, learning could be increased (Tanucan et al., 2022). The principal, acting as the leader, would have the most impact on how technology was implemented. The principal must adopt the role of a transformative leader in his capacity as a technology leader. As a technology leader in school, school principal must create a vision, develop plans, empower stakeholders through staff development, and integrate information and communication technology into teaching and learning process in the school (Oberer & Erkollar, 2018). Dexter's research supported that principals were the key to school progress but found that there was a lack of clear theoretical direction on how leadership and resources could be optimally combined in utilizing technology to support teaching and learning processes (Greany & Earley, 2021). Principal and the vices had a responsibility to foster an atmosphere in which teachers and students could feel confident using technology in the classroom. Principal technology leadership, inquiry learning, and development of technology literacy skills increased the exploration of innovation and learning in schools (Girolami, 2021).

It was necessary to take a portrayal of the school principal's performance evaluation in terms of academic accomplishment, pupils, teachers, and the principal's personal life (DiPaola & Wagner, 2018). Effective principals were those who rose teacher effectiveness, advanced academic achievement for all kids, and consistently adopted leadership activities that had been shown to have a positive impact on student performance. Therefore, a school principal's performance appraisal system should place 70% weight on the principal's ability to improve student achievement and teacher effectiveness outcomes and the remaining 30% focus on demonstrating effective leadership practices and actions (DiPaola & Wagner, 2018). The leadership of the principal affects how well the school performs. Effective school leadership was crucial for student development and school success (Khanyi & Naidoo, 2020). There was a

relationship between the quality of school management and student learning attainments (Ramirez et al., 2023). The principal together with the teacher determined goals to prioritize and achieve high-level learning outcomes.

CONCLUSION

This study concludes that the school principal's performance appraisal conducted by the Surabaya Education Office currently does not reflect the real conditions of the ideal school principal performance so it is necessary to update and develop according to the demands of school principal performance appraisal in the era of digital technology disruption. The developed school principal's performance appraisal model is in the form of a prototype model consisting of employee performance targets, work behavior, the principal's performance appraisal mechanism model and the principal's performance results report in the form of an electronic report card. The dimensions of performance targets in evaluating the performance of school principals as a result of development consist of dimensions of school leadership, technology leadership, implementation of main tasks, school achievement, personal achievement and civil servant discipline. The prototype model for assessing the performance of school principals as a result of the development and reports on the results of school principals' performance in the form of e-reports is declared feasible and can be used for evaluating the performance of school principals in the era of digital technology disruption. As a recommendation for further research, it is necessary to carry out ongoing trials on the effectiveness of the prototype model so that the resulting model can be used to assess the performance of school principals in the era of technological disruption effectively and efficiently. In addition, it is necessary to carry out further development related to indicators of work behavior of school principals as ASN in accordance with scientific developments and the latest government regulations.

Acknowledgment

The authors thanked the Mayor of Surabaya, represented by Mr. Ikhsan as the Regional Secretary who took the time and agreed to be an informant. They also thanked the other involved informants for the endless supports and pleasant cooperation.

Declaration of conflicting interest

The authors declare that there is no conflict of interest in this work.

REFERENCES

- Alsuwaidi, M., Alshurideh, M., Al Kurdi, B., & Salloum, S. A. (2021). Performance appraisal on employees' motivation: a comprehensive analysis. In *Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2020* (pp. 681-693). Springer International Publishing. https://doi.org/10.1007/978-3-030-58669-0_61
- Altun, B., & Sarkaya, P. Y. (2020). The actors of teacher supervision. *Journal of Human Sciences*, 17(1), 284-303. <https://doi.org/10.14687/jhs.v17i1.5880>
- Andini, R. D. (2021). Strategi Pemimpin Dalam Digital Leadership Di Era Disrupsi Digital. *Al-Irsyad: Jurnal Pendidikan Dan Konseling*, 11(1), 58-72. <http://jurnal.uinsu.ac.id/index.php/al-irsyad/article/view/9333/0>
- Antonopoulou, H., Halkiopoulos, C., Barlou, O., & Beligiannis, G. N. (2020). Leadership types and digital leadership in higher education: Behavioural data analysis from University of Patras in Greece.

- International Journal of Learning, Teaching and Educational Research*, 19(4), 110-129. <https://doi.org/10.26803/ijlter.19.4.8>
- Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.
- Aruldoss, A., Kowalski, K. B., & Parayitam, S. (2021). The relationship between quality of work life and work-life-balance mediating role of job stress, job satisfaction and job commitment: evidence from India. *Journal of Advances in Management Research*, 18(1), 36-62. <https://doi.org/10.1108/JAMR-05-2020-0082>
- Bafadal, I., Nurabadi, A., Gunawan, I., Juharyanto, J., Ariyanti, N. S., Adha, M. A., ... & Burham, A. S. I. (2021, December). Moral-based learning leadership process in excellent school. In *International Conference on Information Technology and Education (ICITE 2021)* (pp. 272-277). Atlantis Press.
- Baglama, B., Evcimien, E., Altinay, F., Sharma, R. C., Tlili, A., Altinay, Z., ... & Celebi, M. (2022). Analysis of digital leadership in school management and accessibility of animation-designed game-based learning for sustainability of education for children with special needs. *Sustainability*, 14(13), 7730. <https://doi.org/10.3390/su14137730>
- Basham, L. (2018). *Understanding Texas' Principal Evaluation Using McREL's Balance Leadership Framework: A Case Study of Principals and Their Adaptive Leadership Reflections* (Doctoral dissertation, Texas Wesleyan University).
- Brownlow, M. B. (2018). 23 *Illinois Administrative Code 50: Redefining the Formal Observation in Teacher Evaluation*; A Policy Advocacy Document.
- Buckman, D. G., & Sloan, B. (2022). Repairing the Principal Pipeline: Does Hiring Type Slow the Leak?. *International Journal of Educational Leadership Preparation*, 17(1), 1-22. <https://eric.ed.gov/?id=EJ1345898>
- Cieminski, A. B. (2018). Practices That Support Leadership Succession and Principal Retention. *Education Leadership Review*, 19(1), 21-41. <https://eric.ed.gov/?id=EJ1200804>
- Clarke, P., Ainscow, M., & West, M. (2023). Learning from difference: Some reflections on school improvement projects in three countries. In *Improving schools and educational systems* (pp. 77-89). Routledge.
- Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational research review*, 27, 110-125. <https://doi.org/10.1016/j.edurev.2019.02.003>
- Darling-Hammond, L., & Oakes, J. (2021). *Preparing teachers for deeper learning*. Harvard Education Press.
- DiPaola, M., & Wagner, C. A. (2018). *Improving instruction through supervision, evaluation, and professional development*. IAP.
- Fahrissi, A. (2020). *Kecerdasan Spiritual dan Pendidikan Islam*. SPASI MEDIA.
- Farida, S. I. (2021). Manajemen sumber daya manusia.
- Fauzi, A., & Herminingsih, A. (2021). The Effect of Work Discipline, Motivation, and Compensation on Teacher Performance Smk Yuppentek 1 Tangerang. *Dinasti International Journal of Management Science*, 2(4), 517-536. <https://doi.org/10.31933/dijms.v2i4.781>
- Fitriyah, I., & Santosa, A. B. (2020). Kepemimpinan kepala sekolah dalam menghadapi era revolusi industri 4.0 untuk meningkatkan mutu sekolah. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 5(1), 65-70. <https://doi.org/10.31851/jmksp.v5i1.3538>.
- Francis, O. B. (2020). Appraisal of Veritable Leadership Characters Exhibited by Secondary School Principals: A Case of Osun State Secondary Schools, Nigeria. <https://doi.org/10.23918/ijsses.v7i3p73>

- Girolami, A. (2021). A personal reflection on a career in teacher librarianship. *Access*, 35(4), 19-22. <https://search.informit.org/doi/10.3316/informit.181442206548669>
- Gonzalez, N. D. (2023). A Program Evaluation of a System of Principal Evaluation (Doctoral dissertation, San Diego State University). <https://www.proquest.com/openview/95bbbe18571e07c6ac667f12d91fde73/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Greany, T., & Earley, P. (Eds.). (2021). *School leadership and education system reform*. Bloomsbury Publishing.
- Gumus, A. M., Sa'adiya, A., Aisha, M., Gumus, A. M., Adamu, M. G., Aliyue, S., & Musa, A. (2022). Behavioural Factors Affecting Civil Servants' Intention Towards Covid-19 Vaccination in Kaduna Polytechnic.
- Hustati, R. (2019). Implementasi Peraturan Menteri Pendidikan dan Kebudayaan Nomor 6 Tahun 2018 tentang Penugasan Guru Sebagai Kepala Sekolah dalam Peningkatan Mutu Pendidikan Melalui Penguatan Peran Kepala Sekolah di Kabupaten Banyuasin dan Kabupaten Ogan Komering Ilir. *Jurnal Sumber Daya Aparatur*, 1(1). <https://jurnal.stialan.ac.id/index.php/JSDA/article/view/66>
- Kasali, R. (2018). *The great shifting*. Gramedia Pustaka Utama.
- Kaye, B. A. (2020). Perceptions of Illinois Superintendents Regarding Implementation of Principal Evaluation Instruments After Senate Bill 7 Authorizations (Doctoral dissertation, Loyola University Chicago).
- Keller, S., & Meaney, M. (2018). *Successfully transitioning to new leadership roles*. McKinsey Quarterly.
- Khanyi, J. G., & Naidoo, P. (2020). Principals'role in leadership capacity development of post level one teachers for school leadership. *Perspectives in education*, 38(2), 168-184. <https://hdl.handle.net/10520/ejc-persed-v38-n2-a12>
- Kuratko, D. F., & Morris, M. H. (2018). Corporate entrepreneurship: A critical challenge for educators and researchers. *Entrepreneurship Education and Pedagogy*, 1(1), 42-60. <https://doi.org/10.1177/2515127417737291>
- Lim, C. H., & Teoh, A. P. (2021). Predicting the Influence of Digital Leadership on Performance of Private Higher Education Institutions: Evidence from Malaysia. *Journal of Entrepreneurship, Business and Economics*, 10(1), 1-38. <http://www.scientificia.com/index.php/JEBE/article/view/161>
- Lisi, D. J. (2021). Leading at the Speed of Learning: Superintendent Leadership of P-12 Technology During the COVID-19 Pandemic. https://fisherpub.sjf.edu/education_etd/482
- Luthans, F., Luthans, B. C., & Luthans, K. W. (2021). *Organizational behavior: An evidence-based approach fourteenth edition*. IAP.
- Merritt, A. B., & Wang, Y. (2022). Destructive Leaders in Schools: Can They Be Instructional Leaders?. *NASSP Bulletin*, 106(2), 109-132. <https://doi.org/10.1177/01926365221102379>
- Mohamad, N. A. (2022). Confirmatory Factor Analysis on Technology Leadership Measurement. *Journal of Positive School Psychology*, 6125-6137. <https://journalppw.com/index.php/jpsp/article/view/4463>
- Moon, K. (2019). Specificity of performance appraisal feedback, trust in manager, and job attitudes: A serial mediation model. *Social Behavior and Personality: an international journal*, 47(6), 1-12. <https://doi.org/10.2224/sbp.7567>
- Mulyasa, H. E. (2022). *Manajemen dan kepemimpinan kepala sekolah*. Bumi Aksara.
- Musid, N. A., Matore, M. E. E. M., & Hamid, A. H. A. (2022). Digital Leadership with The Constructs Diversity: A Systematic Literature Review. *Mathematical Statistician and Engineering Applications*, 71(4), 2182-2202. <https://doi.org/10.17762/msea.v71i4.768>

- Nababan, T. M., Purba, S., Batu, J. S. L., & Sianipar, G. (2021, November). School Leadership Strategies in the Digital Era. In *6th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2021)* (pp. 103-106). Atlantis Press.
- O'Neill Jr, R. J., & Nalbandian, J. (2018). Change, complexity, and leadership challenges. *Public Administration Review*, 78(2), 311-314. <https://doi.org/10.1111/puar.12917>
- Oberer, B., & Erkollar, A. (2018). Leadership 4.0: Digital leaders in the age of industry 4.0. *International journal of organizational leadership*. <https://ssrn.com/abstract=3337644>
- Pittman, J., Severino, L., DeCarlo-Tecce, M. J., & Kiosoglous, C. (2021). An action research case study: Digital equity and educational inclusion during an emergent COVID-19 divide. *Journal for Multicultural Education*, 15(1), 68-84. <https://doi.org/10.1108/JME-09-2020-0099>
- Putra, A. E., Rohman, M. T., Linawati, L., & Hidayat, N. (2023). Pengaruh Literasi Digital terhadap Kompetensi Pedagogik Guru. *Murhum: Jurnal Pendidikan Anak Usia Dini*, 4(1), 201-211. <https://doi.org/10.37985/murhum.v4i1.185>
- Ramirez, M. R., Gower, A. L., Brown, C., Nam, Y. S., & Eisenberg, M. E. (2023). How do schools respond to biased-based bullying? A qualitative study of management and prevention strategies in schools. *School Mental Health*, 15(2), 508-518. <https://doi.org/10.1007/s12310-022-09565-8>
- Ridho, M. R., Lesmana, I., Safitri, H. D. A., Meirani, R. K., & Prestiadi, D. (2023, February). Digital Leadership in the Scope of Education. In *International Conference on Educational Management and Technology (ICEMT 2022)* (pp. 52-61). Atlantis Press.
- Rosita, R., & Iskandar, S. (2022). Gaya Kepemimpinan Kepala Sekolah di Era Digital. *Jurnal Basicedu*, 6(4), 6005-6011. <https://doi.org/10.31004/basicedu.v6i4.3127>
- Sebastian, J., Allensworth, E., Wiedermann, W., Hochbein, C., & Cunningham, M. (2019). Principal leadership and school performance: An examination of instructional leadership and organizational management. *Leadership and policy in schools*, 18(4), 591-613. <https://doi.org/10.1080/15700763.2018.1513151>
- Sengupta, M., & Sengupta, N. (2018). Perception of the middle-level managers on 360-degree feedback process: an empirical study. *Journal of Organisation and Human Behaviour*, 7(4), 51.
- Setyawan, D., & Santosa, A. B. (2021). Kompetensi Kepala Sekolah dan Guru sebagai Basis Pencapaian Mutu Pendidikan. *Edukatif: Jurnal Ilmu Pendidikan*, 3(5), 3269-3276.
- Sheninger, E. (2019). *Digital leadership: Changing paradigms for changing times*. Corwin Press.
- Stone, R. J., Cox, A., & Gavin, M. (2020). *Human resource management*. John Wiley & Sons.
- Sunarsi, D., Rohaeni, N., Wulansari, R., Andriani, J., Muslimat, A., Rialmi, Z., ... & Fahlevi, M. (2020). Effect of e-leadership style, organizational commitment and service quality towards indonesian school performance. *Syst. Rev. Pharm*, 11, 472-481.
- Tanucan, J. C. M., Negrado, C. V., & Malaga, G. N. (2022). Digital leadership of school heads and job satisfaction of teachers in the Philippines during the pandemic. *International journal of learning, teaching and educational research*, 21(10), 1-18.
- Taylor, A. C. (2021). *The Efficacy of a University Principal Preparation Program in the Southeastern Region of the United States as Measured by Educational Leadership Standards Found in a National Test, Internship Assessments, and Cumulative Grade Point Average* (Doctoral dissertation, Regent University).
- Uno, H. B., & Nina Lamatenggo, S. E. (2022). *Teori kinerja dan pengukurannya*. Bumi Aksara.
- Usman, H. (2022). *Manajemen: Teori, Praktik, dan Riset Pendidikan Edisi 4*. Bumi Aksara.

- Zondo, R. W. (2018). The influence of a 360-degree performance appraisal on labour productivity in an automotive manufacturing organisation. *South African Journal of Economic and Management Sciences*, 21(1), 1-7.
- Борисенко, Н. (2018). "Barometers" of Influence, or Factors Which Have the Greatest Impact on Learning. A Review of John C. Hattie (2009) *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. *Вопросы образования/Educational Studies Moscow*, (1), 257-265.