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Evaluation of School Digitalization Using the Provus Discrepancy Approach

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ABSTRACT

Research Aims: This study aims to evaluate the implementation of the school digitization program using the Provus Discrepancy Evaluation Model, which emphasizes the analysis of the gap between established standards and actual conditions in the field.
Design/methodology/approach: This study uses a descriptive evaluative approach involving school principals, teachers, and educational staff as respondents. Data was collected through observation, questionnaires, interviews, and relevant document analysis.
Research Findings: The evaluation results show that the program design stage is excellent because it is in line with the school's vision and needs. The installation stage has a compliance rate of 84%, which means that the access infrastructure is adequate but needs to be improved. The process stage has a compliance rate of 76%, which means that implementation consistency is not yet optimal. The product stage has a compliance rate of 80%, meaning that digitalization efficiency has improved, but the program needs to be strengthened.
Theoretical Contribution/Originality: The impact of implementation can also be seen in increased administrative efficiency, data transparency, and communication. The most prominent gaps appear in the Process/Implementation stage, particularly in relation to uneven digital capabilities among teachers/staff, inconsistent implementation of SOPs, and technical-managerial coordination that is not yet fully optimized. In this context, policy evaluation serves as a strategic navigation tool that transforms findings of technical obstacles into a database for more precise and accountable synchronization of school digital governance.

Keywords: Digitalitation, Evaluation, Discrepancy Provus

Introduction

Digitization at the junior high school level is a complex integration that relies not only on hardware aspects, but also on management readiness and operational procedures. The Discrepancy Evaluation Model (DEM) developed by Provus offers an

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analytical framework for identifying gaps between program design standards and actual implementation in the field (Halima et al., 2025; Nurhadi et al., 2024). Through four main dimensions of design, installation, process, and product, DEM allows researchers to precisely map where systemic failures in school digitization programs lie (Hermawansyah et al., 2022).

Previous studies have confirmed that digital leadership and technical infrastructure are the main pillars of successful modern school management (Irvansyah & Wijayanti, 2025; Primansyah et al., 2025). However, according to (Salsabila et al., 2024; Widiyaningtias et al., 2025), large infrastructure investments are often wasted if they are not accompanied by in-depth installation analysis and accurate technical condition documentation. This is exacerbated by the tendency for evaluations to be purely administrative in nature, without using validated instruments to measure the substantial utilization of technology (Nasir, 2013; Zaelani et al., 2025)

However, the current conditions at SMP Negeri 3 Luwuk Banggai show a discrepancy between the vision of regional digitization and operational reality. Although technological devices have been distributed, continuous monitoring mechanisms and standardized operating procedures (SOPs) for digital management have not been fully integrated. Existing evaluations have focused on the quantity of equipment owned, rather than on the effectiveness of management processes and educational services.

Therefore, this study aims to conduct a comprehensive evaluation of the digitization program at SMP Negeri 3 Luwuk Banggai using the DEM approach. By comparing ideal standards and actual realizations through a multi-method data system, this study will not only produce objective non-conformity scores but also provide concrete policy recommendations in the form of SOP improvements (Adnan et al., 2022; Ambarfatih et al., 2025), teacher professional development, and infrastructure strengthening to ensure the sustainability of digital transformation in the school.

Method

This study was conducted at SMP Negeri 3 Luwuk because this school has implemented information and communication technology (ICT) in various aspects of school management so that the process supports the digitization program as explained (Creswell & Clark, 2017) that the selection of location must

The sample in this study consisted of four people, namely the Deputy Principal for Curriculum, the Deputy Principal for Student Affairs, and the Mathematics Teacher, who, according to the researcher, were competent in the integration of technology in school management. The research data was obtained from primary data collected through observation, interviews, and questionnaires given to the principal, teachers, and administrative staff.

The evaluation analysis in this study refers to the Discrepancy Evaluation Model (DEM) developed by Malcolm Provus (Azmi, 2024; Halima et al., 2025; Provus, 1971) with a primary focus on comparing the designed standards and actual conditions in the field. This model consists of several phases, namely

Stage 1: Design

In terms of design, the main variables evaluated are the clarity of program planning and the suitability of the design to the needs of the school. Qualitative indicators observed include: (1) Clarity of Program Outcomes and Standards; (2) Stakeholder Involvement in Outcome Evaluation; (3) Suitability of Program Outcomes to School Needs; (4) Completeness of Implementation Results Documents and Data; (5) Integration of Technical and Managerial Results; (6) Budget and Resource Efficiency; (7) Program Sustainability and Impact on Schools; and (8) Coherence of Results with the Digital School Vision.

Stage 2: Installation

The installation dimension assesses the readiness of human resources, technical resources, and organizational resources in supporting program implementation. The main variables include infrastructure readiness, human resource capacity, and supporting policies that serve as enabling conditions. The indicators observed include: (1) Clarity of Program Achievements and Outcome Standards; (2) Stakeholder Involvement in Outcome Evaluation; (3) Alignment of Program Outcomes with School Needs; (4) Completeness of Implementation Results Documents and Data; (5) Integration of Technical and Managerial Results; (6) Budget and Resource Efficiency; (7) Program Sustainability and Impact on Schools; and (8) Coherence of Results with the Digital School Vision.

Stage 3: Process

At the process stage, the evaluation focuses on how the program is implemented in the field and how the actors interpret the process. The variables analyzed include the implementation of digital management, ICT-based administrative routines, and interactions between system users. Qualitative indicators include: (1) Clarity of Program Achievements and Outcome Standards; (2) Stakeholder Involvement in Outcome Evaluation; (3) Alignment of Program Outcomes with School Needs; (4) Completeness of Implementation Results Documents and Data; (5) Integration of Technical and Managerial Results; (6) Budget and Resource Efficiency; (7) Program Sustainability and Impact on Schools; and (8) Coherence of Results with the Digital School Vision.

Stage 4: Product

The product dimension assesses the results and impact of program implementation on individuals and school organizations. The variables explored are perceived benefits, changes in work behavior, and improvements in managerial effectiveness. Qualitative indicators include: (1) Clarity of Program Achievements and Outcome

Standards; (2) Stakeholder Involvement in Outcome Evaluation; (3) Alignment of Program Outcomes with School Needs; (4) Completeness of Implementation Results Documents and Data; (5) Integration of Technical and Managerial Results; (6) Budget and Resource Efficiency; (7) Program Sustainability and Impact on Schools; and (8) Coherence of Results with the Digital School Vision.

All of these qualitative variables and indicators are linked through thematic linkage logic, whereby the results of the initial dimensions (design and installation) provide the context for interpreting the process and products. Thus, the evaluation results are not only diagnostic but also transformative, providing an overview of how schools can improve policy design and strengthen implementation practices in the future.

Result and Discussion

The Technology Integration Program in School Management at SMP Negeri 3 Luwuk Banggai is part of this educational institution's strategic efforts to respond to the demands of digital transformation in education. In line with national policies on school digitization, this program is designed to strengthen data-based management capacity, improve administrative efficiency, and expand access to educational services in a transparent and accountable manner.

The implementation of this program began in 2023 as a form of the school's commitment to accelerating the process of modernizing education management. The main focus of the program is directed at developing an integrated school management information system, covering the fields of academic administration, finance, personnel, and student services

Program Design Stage

Based on the evaluation results, the Program Design stage shows a very high level of conformity between the ideal plan and its implementation in the field. The Technology Integration Program in School Management at SMP Negeri 3 Luwuk Banggai has been systematically designed by taking into account the needs of the school and the direction of the education digital transformation policy. To provide a more detailed picture, the results of the program design stage assessment are presented in Table 1.

Based on the table 1, it can be seen that all aspects of the assessment received high scores, with an overall average of 4.6 in the excellent category. The highest score was in the aspect of clarity of objectives and design suitability with the digital school vision, indicating that the school has a clear direction and strategy in program development. Meanwhile, a relatively lower score (4.4) was found in the aspect of budget and resource feasibility, indicating the need for increased efficiency in the distribution of financial and technical support.

The results of the evaluation at the program design stage, which showed very high scores, are in line with the program evaluation principles proposed by experts. Chen (2022) in the concept of Theory-Driven Evaluation emphasizes that a program is

considered good if it has a clear logical model, namely a systematic relationship between objectives, inputs, processes, and outcomes. The finding that the aspect of clarity of objectives scored 4.8 proves that SMP Negeri 3 Luwuk Banggai has fulfilled this principle, as the program objectives are formulated in a specific and measurable manner and are in line with the school's digital vision.

Table 1. Program Design Phase Evaluation Results

No	Assessment Aspect	Average Score	Category	Description
1	Clarity of program objectives and standards	4.8	Very Good	Program objectives are specific, measurable, and aligned with the vision of a digital school.
2	Stakeholder involvement in planning	4.5	Very Good	School principals, teachers, and educational staff are actively involved in the program formulation process.
3	Design suitability for school needs	4.6	Very Good	The program design is based on the results of an analysis of the school's internal needs.
4	Completeness of program components and documents	4.7	Very Good	The document includes activity plans, implementation schedules, and evaluation indicators.
5	Budget and resource feasibility	4.4	Good	Funding sources are available with efficient utilization planning
6	Program continuity (sustainability plan)	4.5	Very Good	There are plans for further training and maintenance of the digital system.
7	Design alignment with the digital school vision	4.8	Very Good	Program design supports the direction of transformation towards technology-based schools.

Source: Data Primer Setelah diolah, 2025

In general, the program design stage is in the excellent category, with a compliance rate of around 90% of the ideal standard. This shows that the school already has a strong conceptual framework and work plan documents to guide program implementation in the next stage. Good design quality also forms the basis for the success of the subsequent stages (Karmila et al., 2024; Putrianingsih et al., 2021), as each element of the activities has been considered in terms of relevance, efficiency, and

sustainability. Therefore, it can be concluded that there is no significant difference between the design standards and the actual conditions in schools at this stage.

Program Installation Stage

The Installation Stage is the phase of preparing facilities, infrastructure, and human resources as prerequisites for the success of the program. Based on the evaluation results, this stage received an average score of 4.2, which is categorized as good. These results indicate that the school has prepared adequate technological infrastructure, but there are still some technical limitations that need to be improved. To provide a more detailed overview, the results of the program design stage assessment are presented in Table 2 below:

Table 2. Program Installation Phase Evaluation Results

No	Assessment Aspect	Average Score	Category	Description
1	Availability and functionality of ICT devices	4.3	Good	Computers, Wi-Fi networks, and servers are functioning optimally.
2	Equal access to infrastructure	4.0	Fairly good	Internet access is not yet available throughout the entire building.
3	Technical support and maintenance	4.1	Good	There are internal technicians, but their numbers are limited.
4	Human resources training in the use of the system	4.2	Good	Teachers have undergone initial training in digital management.
5	Data security and management	4.3	Good	The system has data protection and automatic backups.

Source: Data Primer Setelah diolah, 2025

The results of the installation phase evaluation, which received an average score of 4.2 in the good category, show that SMP Negeri 3 Luwuk Banggai has prepared adequate technological facilities and infrastructure to support the implementation of the digital integration program. This condition is in line with Provus (1971)view in the Discrepancy Evaluation Model, which emphasizes that the installation stage must ensure that all inputs, devices, and supporting resources are in place before the program is run. Provus emphasizes that at this stage, evaluators need to compare the planned standards with the actual conditions to identify whether there are minor discrepancies that can still be corrected without hindering the main implementation of the program. A score of 4.2 indicates that most standards have been met, with a few minor discrepancies that can still be addressed through internal improvement policies. Fullan (2016) states that the success of digital transformation in schools is highly dependent on infrastructure readiness and the availability of stable technology. In addition, Santoso & Heriyanto (2025) explain that a school's readiness to adopt technology is not only determined by the number of devices, but also by technical

support and system maintenance capacity. The argument from Ottenbreit-Leftwich et al. (2010) also emphasizes that technology will not have a significant impact without the readiness of its users' competencies. From the perspective of data security, Ujung & Nasution (2023) emphasize the importance of data protection systems, automatic backups, and standardized security policies in supporting the implementation of educational technology.

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The results of the installation phase evaluation align with applicable theoretical standards. The readiness of physical facilities, technical support, human resource training, and data security indicate that the school has met most of the basic installation requirements, while the gaps found are only minor incompatibilities that can still be strategically overcome through improved network access, the addition of technicians, and further training. Therefore, the results of the installation phase evaluation are considered valid and in line with the academic literature on technology implementation readiness in educational environments.

Process Stage

The Process Stage is the core of program implementation, where the effectiveness of digital system application is tested in school operations. Based on the evaluation results, this stage received an average score of 3.8, which is considered fairly good. This result indicates that program implementation has been running according to plan, but has not been consistent across all work units. To provide a more

detailed picture, the results of the program design stage assessment are presented in Table 3.

Based on the table 3, the results show a moderate discrepancy, which is mainly caused by variations in digital competence and user discipline. Some teachers have consistently adopted digital systems, while others still use manual methods. Monitoring has not been carried out in real time, so the effectiveness of supervision has not been optimal. Thus, this stage requires intervention in the form of further training, digital supervision, and incentives for consistent use of the system.

Table 3. Process Stage Evaluation Results

No	Assessment Aspect	Average Score	Category	Description
1	Consistency in implementing digital SOPs	3.9	Fairy Good	Procedures are being implemented, but are not yet uniform across units.
2	Teacher and staff involvement	3.7	Fairy Good	Some teachers are not yet actively using the digital system.
3	Supervision and monitoring of implementation	3.8	Fairy Good	Supervision is not yet fully data-driven.
4	Work and time efficiency	3.9	Fairy Good	Efficiency has improved, but data input is still slow.
5	Digital communication and coordination	3.7	Fairy Good	The online platform is not yet being used optimally.

Source: Primary Data After Processing, 2025

When viewed as a whole, the results of the process evaluation show a discrepancy model, indicating that the program implementation is on the right track but requires strengthening interventions. Theoretically, this is in line with Provus (1971) evaluation model, which views discrepancies as important information for improvement, rather than program failures. Therefore, according to the statements (Sahudi, 2025; Sumua et al., 2025), recommendations in the form of further training, digital supervision, and incentives for consistent users are in line with the solutions recommended in the literature on change management and educational technology integration. Thus, the results of the process evaluation are not only valid but also consistent with the theories and research of experts, indicating that the program implementation is in a period of adaptation and requires stronger change management strategies to achieve optimal effectiveness.

Based on the table above, the results show moderate discrepancies, mainly due to differences in digital competence and user discipline. Some teachers have consistently adopted digital systems, while others still use manual methods. Monitoring has not been carried out in real time, so the effectiveness of supervision

has not been optimal. Therefore, this stage requires intervention in the form of further training, digital supervision, and incentives for consistent use of the system.

The findings regarding moderate discrepancies at the installation stage indicate a structural deficit in the organization's readiness for digital transformation. Referring to Provus Discrepancy Evaluation Model (DEM) framework, the installation phase should ensure that all instruments, both technical and human resources, are calibrated according to the initial design standards. However, the emergence of digital competency polarization among users shows that the technology diffusion strategy has failed to mitigate adoption barriers at the grassroots level. As explained in the Diffusion of Innovations theory by (Nareswari & Hafidz, 2025; Rogers, 2003), the failure to reach laggards or manual users is not merely an individual technical problem, but rather a systemic failure to create an inclusive digital ecosystem, which actually widens the gap between adaptive and resistant groups.

As a policy implication, proposed interventions that rely solely on training and incentives risk getting stuck in superficial solutions that fail to address the root of the problem. This phenomenon often leads to what Pfeffer & Sutton (2000), 2000) refer to as the Knowing-Doing Gap, where organizations have knowledge about technology but fail in its practical execution (Haamann & Basten, 2018). Training without restructuring monitoring protocols will only add to the cognitive burden without changing the work culture. Therefore, it is necessary to integrate extrinsic motivation (incentives) with a systematic redesign of digital governance. Without improvements to the control structure and operational standardization, these transformation efforts will only result in fragile symbolic compliance that is unsustainable in the long term. Additionally (Sahudi, 2025; Sumua et al., 2025), recommendations for advanced training, digital monitoring, and incentives for consistent users are in line with solutions recommended in the literature on change management and educational technology integration.

Product Stage

The Product stage assesses the actual results and impact of program implementation on school management effectiveness. Based on the evaluation results, this stage received an average score of 4.0 (good category). The program has been proven to have a positive impact on administrative efficiency, information transparency, and school data accuracy. To provide a more detailed picture, the results of the program design stage assessment are presented in Table 4.

Based on the results in the table 4, the product stage shows encouraging results. The use of digital systems has improved administrative efficiency and communication between units. However, the sustainability of the program still depends on technical support and leadership commitment to updating the system and conducting regular training. Thus, the product stage shows minor discrepancies, as the final results have met most expectations, although there is still potential for improving the sustainability of the system in the future.

Suharti & Mariam (2025) explain that the digitization of educational administration consistently improves work efficiency through process automation, data redundancy reduction, and service flow acceleration. Furthermore, (Bush & Glover, 2025) state that the use of school information systems can strengthen transparency and accountability, as data is organized in real time and is easily traceable. In the context of user satisfaction, (Davis, 1989) through the Technology Acceptance Model framework emphasizes that user satisfaction and acceptance are highly dependent on perceptions of ease of use and system benefits. Fullan (2016) emphasizes that the sustainability of educational technology innovation is greatly influenced by school leadership support in providing training, updating equipment, and strengthening digital culture.

Table 4. Product Stage Evaluation Results

No	Assessment Aspect	Average Score	Category	Description
1	Improved work efficiency	4.1	Good	Faster and more accurate administrative processes
2	Transparency and accountability	4.2	Good	More transparent and measurable school reporting
3	User satisfaction (teachers and staff)	3.9	Fairy Good	Most users are satisfied with the system
4	System and service sustainability	3.8	Fairy Good	Requires device updates and routine maintenance

Source: Primary Data After Processing, 2025

Based on these experts' perspectives, the results of the product stage evaluation can be categorized as minor discrepancies, because most of the program results are in line with the planned standards and expectations, but there is still room for improvement, especially in terms of technical sustainability and long-term managerial support. Thus, the findings in the evaluation table are not only empirically valid but also consistent with theory and the latest research results.

Discrepancy Analysis

Discrepancy analysis is conducted to assess the extent of the difference between the ideal conditions set out in the program design and the actual results found during implementation in the field. This analysis is central to the Discrepancy Provus Evaluation Model, because through the identification of discrepancies, evaluators can determine which areas are effective and which areas still need improvement. In the context of this study, the discrepancy analysis covers four main dimensions, namely Program Design, Installation (Resources and Infrastructure), Implementation Process, and Products (Program Outcomes and Impact).

To gain a comprehensive understanding, a comparison was made between the ideal standard (maximum score of 5.0) and the actual results of each stage. The results of this comparison are presented in Table 5.

Based on the table 5, the results of the gap analysis in the Technology Integration Program in School Management show that the level of conformity between the ideal standard and the actual conditions reached an average of 83%, which is classified as effective. This finding is in line with the basic principles of the Provus Gap Evaluation Model, namely that the smaller the gap between the standard and actual performance, the higher the level of program effectiveness. According to Provus (1971), the key to evaluation is to identify gaps that can still be systematically improved to ensure program sustainability.

Table 5. Discrepancy Analysis Results

No	Evaluation Stage	Ideal Standard	Actual Score	Difference (Gap)	Percentage of Conformity	Discrepancy Category	Interpretation
1	Program Design	5.0	4.6	0.4	92%	Very Small	Design is in line with the school's vision and management needs.
2	Installation (Facilities and Human Resources)	5.0	4.2	0.8	84%	Small	Infrastructure is adequate, but access needs to be improved.
3	Process (Implementation)	5.0	3.8	1.2	76%	Medium	Consistency in implementation and user engagement is not yet optimal.
4	Product (Results and Impact)	5.0	4.0	1.0	80%	Small	Efficiency has improved, but program sustainability needs to be

	strengthened.

Source: Primary Data After Processing, 2025

At the Program Design stage, the level of conformity reached 92%, indicating that the planning documents had been prepared realistically and in accordance with needs. This finding is reinforced by Ornstein & Hunkins (2018), who emphasize that good, needs-based program design is the most decisive factor in the successful implementation of educational innovation. They state that clear design will minimize the risk of gaps at the implementation stage. Therefore, the very small gap (0.4) at the design stage indicates that the program's foundation has been well formulated.

The Installation stage, with a compliance rate of 84%, shows that facilities, infrastructure, and human resource support are adequate, although the distribution of technical capacity still needs to be improved. This is in line with the opinion of Consoli et al. (2023), who emphasize that successful technology implementation is not only supported by hardware but also by the adaptability and digital habits of its users. Therefore, the small difference (0.8) found reflects the real condition that technological readiness encompasses both physical aspects and user competence.

In the Implementation Process stage, the largest difference (1.2) and a compliance rate of 76% indicate the need to strengthen consistency in implementation. These findings are in line with Fullan's (2016) analysis, which states that technology-based change in schools is often hampered by uneven adoption rates among teachers and weak data-based monitoring mechanisms. Fullan (2016) emphasizes the importance of ongoing guidance and instructional leadership to ensure that technology is used optimally. Therefore, the moderate imbalance at this stage is reasonable and can be overcome through strengthening digital capacity and monitoring.

Meanwhile, the Product stage, with a compliance rate of 80%, shows that this program has had a real impact on administrative efficiency and data transparency, although efforts to improve sustainability are still needed. These findings are in line with reports (Nuryana et al., 2024; Syahputra et al., 2025) stating that digital systems have been proven to improve work efficiency, but their sustainability is highly dependent on continuous updates, technology maintenance, and leadership commitment to providing training.

Therefore, the 1.0 discrepancy at the product stage can be categorized as small to moderate and can be minimized with policies to improve system quality on a regular basis. Overall, the results of the nonconformity analysis, which showed a compliance rate of 83%, support the statement that this program has been running effectively, in line with Provus' (1971) view that a small discrepancy indicates the success of the program in meeting standards.

However, this success must be followed by a strategy of continuous improvement, as emphasized by Deming (1986), who states that sustainability in quality can only be achieved through continuous evaluation and improvement.

Therefore, the policy that can be adopted is that schools must integrate rigid formal standardization policies with performance-based digital culture restructuring. The administrative mandate that eliminates the dualism of manual methods must be followed by the implementation of a Digital Monitoring Dashboard as a proactive Early Warning System, so that the supervisory function is transformed from a mere administrative routine into real-time and responsive quality control. Simultaneously, to mitigate the knowing-doing gap, interventions must shift from conventional training to peer-mentoring mechanisms and incentive recalibration based on data accuracy and consistency, thereby creating a digital ecosystem that intrinsically forces permanent continuous improvement.

Conclusion

The Technology Integration Program at SMP Negeri 3 Luwuk Banggai in 2025 has generally been implemented according to standards, especially in the design stage, which shows excellent planning and is in line with the vision of a digital school. The impact of implementation can also be seen in increased administrative efficiency, data transparency, and communication. The most prominent gaps appear in the Process/Implementation stage, particularly related to the uneven digital capabilities of teachers/staff, inconsistent implementation of SOPs, and technical-managerial coordination that is not yet fully optimal. Conversely, the design and installation stages show the lowest level of gaps. Recommendations for future researchers include expanding the research object to other schools at the district or provincial level to obtain a comparative picture of the effectiveness of school management digitization programs.

References

Adnan, D. R. A., Kaloko, J., Sihombing, K., & Mahmud, P. (2022). Pengembangan Media Poster Sebagai Media Edukasi Orang Tua Dalam Membangun Perundungan. *JKKP: Jurnal Kesejahteraan Keluarga Dan Pendidikan*, *9*(2). https://doi.org/https://doi.org/10.21009/JKKP.092.10

Ambarfatih, C. D., Khotimah, K., Haerani, R. P. R., & Sandy, A. T. (2025). School Digitalization: Evaluation Program in Sekolah Penggerak at Samarinda City. *BORJU: Borneo Educational Journal*, *7*(1). https://doi.org/https://doi.org/10.24903/bej.v7i1.1965

Azmi, M. (2024). Evaluasi Program Pendidikan Model Discrepancy. *Maruki: Jurnal Pendidikan Dan Pengabdian*, *2*(2), 1–10.

Bush, T., & Glover, D. (2025). Educational leadership preparation and development in Africa: a literature review. *International Journal of Educational Management*, *39*(5), 1240–1255. https://doi.org/https://doi.org/10.1108/IJEM-01-2025-0005

Consoli, T., Désiron, J., & Cattaneo, A. (2023). What is "technology integration" and how is it measured in K-12 education? A systematic review of survey instruments from 2010 to 2021. *Computers & Education*, *197*, 104742. https://doi.org/https://doi.org/10.1016/j.compedu.2023.104742

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and Conducting Mixed Methods Research* (Third Edit). Sage Publications.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319–340. https://doi.org/https://doi.org/10.2307/249008

Deming, W. E. (1986). *Out of the Crisis*. MIT Press. https://doi.org/https://doi.org/10.7551/mitpress/11457.001.0001

Fullan, M. (2016). *The New Meaning of Educational Change* (Fifth Edit). Teachers College Press.

Haamann, T., & Basten, D. (2018). The role of information technology in bridging the knowing-doing gap: an exploratory case study on knowledge application. *Journal of Knowledge Management*, *23*(4), 705–741. https://doi.org/https://doi.org/10.1108/JKM-01-2018-0030

Halima, H., Rasyid, M. N. A., Mania, S., & Nurlina, N. (2025). Penggunaan Model Discrepancy dalam Evaluasi Program Pembelajaran Al Islam dan Kemuhammadiyahan (AIK) di Universitas Muhammadiyah Kendari. *PESHUM: Jurnal Pendidikan Sosial Dan Humaniora*, *4*(2), 2137–2147. https://doi.org/https://doi.org/10.56799/peshum.v4i2.7538

Heriyanto, & Santoso, H. (2025). Analisa Kesiapan Sekolah dalam Pemanfaatan Teknologi untuk Pembelajaran. *Didaktika: Jurnal Kependidikan*, *14*(1), 223–232. https://doi.org/https://doi.org/10.58230/27454312.1981

Hermawansyah, Lahming, & Jamaludin. (2022). Modifikasi Knapsack Sprayer Elektrik Sebagai Penabur Pupuk Padat. *Jurnal Pendidikan Teknologi Pertanian*, *8*(1).

Irvansyah, R., & Wijayanti, W. (2025). Peran Kepemimpinan Kepala Sekolah Dalam Meningkatkan Kualitas Pendidikan. *Jurnal Dinamika Manajemen Pendidikan*, *10*(1). https://doi.org/https://doi.org/10.26740/jdmp.v10n1.p29-38

Karmila, N., Annas, F., & Oktavia, S. (2024). Perancangan Media Pembelajaran Berbasis Multimedia untuk Meningkatkan Kualitas Pembelajaran di Sekolah Dasar. *JEMAST: Journal of Education Management and Strategy*, *3*(1), 43–49. https://doi.org/https://doi.org/10.57255/jemast.v3i01.586

Nareswari, A. Z., & Hafidz. (2025). Integrasi Teknologi Informasi Dalam Kurikulum Pendidikan Agama Islam di Indonesia; Pendekatan Teori Difusi Inovasi M.Rogers. *IHSAN: Jurnal Pendidikan Islam*, *3*(1), 129–137. https://doi.org/https://doi.org/10.61104/ihsan.v3i1.437

Nasir, M. (2013). Evaluasi Penerimaan Teknologi Informasi Mahasiswa di Palembang Menggunakan Model UTAUT. *Seminar Nasional Aplikasi Teknologi Informasi*.

Nurhadi, Rachman, A., Wardaya, K., & Lisda, L. (2024). Evaluasi Program Ekstrakulikuler Pramuka (Studi Evaluasi Discrepancy Evaluation Model di Sekolah Menengah Pertama Islam Nurul Fikri Boarding School Serang). *El Madrasa: Jurnal Manajamen Pendidikan Islam*, *4*(1), 27–50.

Nuryana, M. L., Ibrahim, T., & Arifudin, O. (2024). Implementasi dan Transformasi Sistem Manajemen di Era Digital. *Jurnal Tahsinia*, *5*(9), 1325–1337. https://doi.org/https://doi.org/10.57171/jt.v5i9.614

Orsntein, A. C., & Hunkins, F. P. (2018). *Curriculum: Foundations, Principles, and Issues*. Pearson Education.

Ottenbreit-Leftwich, A. T., Glazewski, K. D., Newby, T. J., & Ertmer, P. A. (2010). Teacher value beliefs associated with using technology: Addressing professional and student needs. *Computers & Education*, *55*(3), 1321–1335. https://doi.org/https://doi.org/10.1016/j.compedu.2010.06.002

Pfeffer, J., & Sutton, R. I. (2000). *The Knowing Doing Gap: How Smart Companies Turn Knowlegde into Action*. Harvard Business School Press.

Primansyah, A., Bunyamin, B., & Nugrahani, D. (2025). Peran Kepala Sekolah Sebagai Manajer Dalam Digitalisasi Kegiatan Belajar Mengajar (KBM) di Sekolah Dasar. *SOCIAL : Jurnal Pendidikan IPS*, *5*(1). https://doi.org/https://doi.org/10.51878/social.v5i1.4688

Provus, M. (1971). Evaluation as Public Policy. *Curriculum Theory Network*, *3*(9), 33–44. https://doi.org/https://doi.org/10.1080/00784931.1972.11075703

Putrianingsih, S., Muchasan, A., & Syarif, M. (2021). Peran Perencanaan Pembelajaran Terhadap Kualitas Pengajaran. *INOVATIF: Jural Penelitian Penddikan, Agama Dan Kebudayaan*, *7*(1), 138–163. https://doi.org/https://doi.org/10.55148/inovatif.v7i1.211

Rogers, E. M. (2003). *Diffusion of Innovation* (Third Edit). The Free Press.

Sahudi, S. (2025). Virtual Coaching Dalam Supervisi Manajerial: Inovasi Efisiensi Untuk Peningkatan Mutu Madrasa di Era 4.0. *MANAJERIAL: Jurnal Inovasi Manajemen Dan Suoervisi Pendidikan*, *5*(1), 240–247. https://doi.org/https://doi.org/10.51878/manajerial.v5i1.5091

Salsabila, F. N., Suminar, L., Agustina, Y., Rezeki, Y. S., & Ramdhani, M. F. (2024). Dampak Sistemik Korupsi Terhadap Perekonomian, Sistem Pendidikan, Dan Pembagunan Infrastruktur Di Indonesia: Sebuah Analisis Komprehensif. *Jurnal Multidisiplin Ilmu Akademik*, *1*(6), 210–220. https://doi.org/https://doi.org/10.61722/jmia.v1i6.2917

Suharti, T., & Mariam, M. (2025). Penerapan Sistem Informasi Manajemen sebagai Upaya Modernisasi Administrasi Pendidikan di Madrasah. *At Tadbir: Islamic Education Managemen Journal*, *3*(1), 65–74. https://doi.org/https://doi.org/10.54437/attadbir.v3i1.2115

Sumua, S. D. M., Labuan, B. W., Takalumang, L. M., Rompiis, N. N. J., & Omkarsba,

H. (2025). Peran Supervisi Pendidikan Dalam Meningkatkan Mutu Pendidikan Di Era Digital (Studi Literatur). *Jurnal Pendidikan Indonesia*, *6*(1), 156. https://doi.org/10.59141/japendi.v6i1.6982

Syahputra, G. A., Indrawati, N., & Gunawan, A. (2025). Pengaruh Penggunaan Teknologi Informasi Terhadap Efisiensi Kerja Pegawai: Systematic Literature Review. *Jurnal Strategi Bisnis Dan Keuangan*, *6*(1).

Ujung, A. M., & Nasution, M. I. P. (2023). Pentingnya Sistem Keamanan Database Untuk Melindungi Data Pribadi. *JISKA: Jurnal Sistem Informasi Dan Informatika*, *1*(2), 44–47. https://doi.org/https://doi.org/10.47233/jiska.v1i2.929

Widiyaningtias, A., Murtianingsih, & Dura, J. (2025). Pengaruh Pendanaan Sekolah, Kebijakan Pengelolaan Dana Sekolah, Transparasi Penggunaan Dana, dan Kemampuan Manajerial Terhadap Pengembangan Infrastruktur Sekolah Dan Kualitas Pendidikan Di Sekolah Dasar Annur Tumpang. *Jurnal Riset Aplikasi Manajemen*, *3*(3). https://doi.org/https://doi.org/10.32815/jiram.v3i3.107

Zaelani, M. Y., Zaelani, Z., & Sansongko, A. S. (2025). Pengembangan Media Pembelajaran Pop-Up Book 3D bertema Alat Tangkap Ikan Ramah Lingkungan untuk Meningkatkan Pemahaman Konsep Siswa. *AInara Journal: Jurnal Penelitian Dan Pengabdian Keapda Masyarakat Bidang Pendidikan*, *6*(2). https://doi.org/https://doi.org/10.54371/ainj.v6i2.885