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Personal, organizational and digital leadership of school leaders

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Abstract

This study investigated the levels and relationships of personal, organizational, and digital leadership among school leaders in the Schools Division of Occidental Mindoro. Anchored on contemporary leadership and digital transformation frameworks, the study aimed to assess leadership competencies across multiple domains and determine how these dimensions relate to one another in the context of school management. Specifically, it examined personal leadership in terms of self-awareness, results orientation, self-management, decision-making, and organizational skills; organizational leadership in terms of participative governance, human resource development systems, collaborative school culture, and organizational support and work systems; and digital leadership in terms of digital literacy, technology adaptation, technological vision, and data-driven decision-making. It also determined significant differences in leadership practices when respondents were grouped according to demographic variables such as sex, years of experience, educational attainment, and current position. A quantitative descriptive-correlational research design was employed, involving 400 public elementary and secondary school leaders, including Master Teachers, Head Teachers, Officers-in-Charge, Assistant Principals, and Principals. Data were gathered using a structured and validated questionnaire with established reliability and internal consistency. Statistical tools such as mean, standard deviation, and inferential tests were used to analyze the data. Findings revealed that school leaders generally demonstrated high levels of personal, organizational, and digital leadership, indicating strong leadership competencies across domains. Significant relationships were identified among the three leadership variables, suggesting that these dimensions are interrelated and collectively contribute to effective school leadership. However, notable differences were observed when grouped according to selected demographic variables. The study highlights the importance of continuous leadership development, fostering collaborative school environments, and enhancing digital capabilities. It recommends targeted professional development programs, participatory governance practices, and strategic integration of technology to strengthen leadership effectiveness and improve overall school performance.

Keywords: digital leadership, organizational leadership, personal leadership, school leadership, technology integration, data-driven decision-making

Personal, organizational and digital leadership of school leaders

1. Introduction

In the rapidly changing landscape in the educational leadership, the competencies of school leaders have become fundamental factors of the school success. Schools deal with the myriads of challenges in terms of digital age, school leaders are expected to demonstrate not only strong personal leadership but also organizational and digital leadership (ScienceDirect, 2025). The Schools Division of Occidental Mindoro, as an integral component of the Philippine basic education system under the Department of Education (DepEd), operates within a geographically dispersed and resource-constrained environment. In view of this context, school leaders are mandated to demonstrate effective leadership competencies to ensure the delivery of quality, equitable and inclusive education in basic education. These certain responsibilities necessitate the integration of personal, organizational and digital leadership in addressing administrative, instructional and technological demands across public schools.

The study centers on three essential leadership variables, namely: personal leadership, organization leadership and digital leadership, which are considered fundamental in strengthening school management and instructional leadership. Personal leadership refers to an individual's capacity to effectively lead oneself through self-awareness, discipline, and sound judgment in achieving goals and influencing others. It encompasses key competencies such as self-awareness, results orientation, self-management, decision-making, and organizational skills, which enable school leaders to regulate their behavior, set clear goals, make informed decisions, and manage tasks efficiently. This construct is grounded in emotional intelligence and leadership theory, which emphasize self-regulation, motivation, and personal effectiveness (Northouse, 2019). On the other hand, organizational leadership pertains to the ability of school leaders to manage people, structures, and processes to achieve institutional goals. It includes fostering participative governance, implementing effective human resource development systems, promoting a collaborative school culture, and ensuring organizational support and efficient work systems. These dimensions reflect the leader's role in facilitating teamwork, empowering stakeholders, and creating an environment conducive to teaching and learning (Yukl, 2013; Leithwood et al., 2020). Meanwhile, digital leadership refers to the capability of school leaders to integrate and utilize technology to support teaching, learning, and school management. It involves competencies such as digital literacy, technology adaptation, technological vision, and data-driven decision-making, which enable leaders to guide digital transformation, support innovation, and use data effectively for continuous improvement. This concept highlights the importance of leveraging technology to enhance educational outcomes in the digital age (Sheninger, 2019; Zhu et al., 2025). Moreover, the rapid shift toward Education 4.0, as well growing influence of the Fourth Industrial Revolution, have reshaped global standard of school leadership. School leaders are expected to manage people and resources effectively. In addition to that, they should possess personal leadership, demonstrate organization leadership, and be competent in the application of technology for the delivery of quality education. (Zhu et al., 2025).

In the Philippine basic education system, this expectation is legally institutionalized through the Philippine Professional Standards for School Heads (PPSSH) which outlines the knowledge, abilities, attitudes and leadership behaviors required to effectively lead schools in the 21st century (DepEd, 2020). Pursuant to Deped Order No.024, s.2020, school leaders are tasked to create enabling environments for effective teaching and learning which stresses domains such as leading strategically, developing self and others, and building connections. These standards are aligned with personal leadership such as self-awareness, ethical practice, resilience and the ability to influence others toward shared goals, as well as organizational leadership practices such as participative governance, human resource development system, collaborative school culture and organization support and work system.

Meanwhile, Department of Education mentioned that these particular indicators are significant in promoting proactive governance and enhancing teaching and learning outcomes. It ensures that certain schools in the country

are responsive to the needs of teachers and learners. The department has stressed the implication of digital transformation through the Basic Education Development Plan (BEDP) 2030. School leaders need to be technologically inclined and compliant to the context of predicaments in education (DepEd, 2022). UNESCO (2024) also added that those educational leaders prepared for the future should possess a combination of personal, organizational and digital leadership.

The COVID-19 pandemic has further accelerated the utilization of digital technologies in education, making the capacity of the school heads to lead in a digital environment. Furthermore, the pandemic has expedited the change to distance modality with the support of technology-mediated learning which reveals both strengths and weaknesses in basic education's digital setting. In response, the DepEd's Digital Rise Program seeks to resolve these challenges by investing in infrastructure, software and capacity-building to support digital literacy and ICT-assisted teaching and learning. Organizational and digital leadership are no longer an option for school leaders, but rather mandatory to ensures managing learning management systems and supporting teachers' use of digital tools (DepEd, 2022).

Marcial et al. (2024) stated that although teachers have developed moderate levels of online teaching competence, disparities in access, confidence, and advanced use of ICT remain. This implies that school leaders must demonstrate strong organizational and digital leadership, enabling them to support teachers effectively and plan appropriate professional development. Global evidence likewise shows that school leaders' technology leadership and digital leadership are positively associated with teachers' technology integration, instructional innovation and school improvement (Thannimalai et. al.,2018). More recent systematic reviews of digital leadership in education depicts digital leadership as a dynamic, evolving construct that integrates vision, technological fluency, data-informed decision-making and a strong focus on digital safety and lifelong learning. It stresses the need to know how school leaders enact digital leadership in specific contexts, particularly in basic education systems in developing countries where issues of connectivity are distinct (Zhu et al., 2025). However, despite of increasing studies on organizational and digital leadership internationally and within the Philippines, most studies focus on urban or relatively well-resources division, higher education institutions or even broad national analyses (Marcial et al., 2024). There remains a significant gap in localized empirical data particularly in rural areas such as Occidental Mindoro. In relation to that, Quidasol (2020) revealed the gaps in school leaders' digital leadership, particularly in technology integration and data management

In rural setting, leadership efficacy is further impacted by contextual challenges, such as limited connectivity and resources. The comprehensive implementation of DepEd programs and the optimization of ICT integration are challenging for school leaders under these circumstances (Dela Rosa et. al.,2025). Tthey noted that although school leaders claimed to be proficient at using technology, there are still problems with digital self-efficacy and contextual concerns in rural schools where technology is still in its infancy. These issues make it difficult for DepEd orders to be completely implemented and for school administrators to be effective. Given these circumstances, the presence of disadvantaged areas and persistent connectivity and resource constraints, it is plausible that school heads face distinctive leadership and digitalization challenges that are not fully captured in national or international context, yet these leaders are expected to meet the PPSSH standards, support DepEd's digitalization programs and ensure the no learner is left behind in an increasingly digital learning environment (DepEd, 2022).

Therefore, this study is undertaken to address the identified gaps by examining the personal, organizational, and digital leadership of school leaders in the Schools Division of Occidental Mindoro provided an opportunity to evaluate the current conditions within the specified locale. Furthermore, it sought to address existing gaps between the expected competencies of leaders and their actual leadership practices by generating evidence-based data derived from the findings of the research. The findings of the study are expected to provide significant value to various stakeholders. Specifically, school leaders in the Division of Occidental Mindoro may use the findings to improve their leadership practices and align them with national standards and policy guidelines. Furthermore, National educators, particularly teachers and education stakeholders, may benefit from a better understanding of

how leadership aspects affect school performance in a variety of educational circumstances. Ultimately, this study provides a basis for the development of targeted leadership development programs and policy recommendations that will support the alignment of leadership standards, organizational practices, and digital initiatives toward improved school effectiveness and educational equity.

Objectives of the Study - Generally, this study aimed to examine how school leader's personal and organization leadership influenced their digital leadership within the context of public school in the Schools Division of Occidental Mindoro. Specifically, it sought to analyze the level of personal leadership across dimensions such as self-awareness, results orientation, self-management, decision making and organizational skills. Furthermore, the study examined the extent of organization leadership of school leaders in terms of participative governance, human resource development system, collaborative school culture and organizational support and work system. In addition, it evaluated the extent of digital leadership with respect to digital literacy, technology adaptation, technological vision and data-driven decision making. Finally, based on the findings, the study proposed a professional development plan anchored on the findings of the study intended to enhance the personal, organizational and digital leadership of school leaders to support continuous improvement in school management and instructional leadership.

2. Methods

Research Design - This study utilized a quantitative descriptive-correlational research design to examine the relationship among personal, organizational and digital leadership among school leaders in Schools Division of Occidental Mindoro. The descriptive method design was employed to determine and describe the level of personal, organizational and digital leadership of school leaders in the Schools Division of Occidental Mindoro. Meanwhile, the correlational design was used to examine the relationships among these three leadership variables. The study was quantitative, as it entailed the gathering of numerical data through the use of an organized questionnaire, and examination of connections and distinctions amid variables with the help of the statistical software.

Participants of the Study - The participants of the study consisted of 400 public elementary and secondary leaders in the Schools Division Office of Occidental Mindoro. These included Master Teacher I-IV, Head Teacher I-IV, Officer-in-Charge, Assistant Principal I-III and Principal I-IV. All identified school leaders in the division were invited to participate in the study upon approval from from the Office of the Schools Division Superintendent. Participation was voluntary, and those who agreed to answer the questionnaire were considered as respondents.

Data Gathering Instrument - The study used a structured survey questionnaire as the primary data-gathering tool for data collection. The instrument consisted of four parts: the first part gathered demographic profile of the respondents, including age, sex, years of experience as a school leader, highest educational attainment, and current position. The second part measured of personal leadership across its dimensions, which was adapted based on the study of Berkovich et al. (2021) and the third section measured organizational leadership through participative governance, human resource development system, collaborative school culture, and organizational support and work system came in the study of Berkovich et al. (2021) and Tian et al. (2020). The last part evaluated digital leadership in terms of digital literacy, technology adaptation, technological vision, and data-driven decision-making derived from the research of Subade (2024). A four-point Likert scale was used in answering the questionnaire where corresponded to 4 – Strongly Agree, 3 – Agree, 2 – Disagree, and 1 – Strongly Disagree. Prior to the actual data gathering, the instrument was pilot-tested, and reliability was established using Cronbach's alpha, with a value of 0.70 or higher will be considered acceptable.

The Cronbach's Alpha results revealed that all variables exhibited acceptable to excellent reliability, confirming the consistency of the research instrument. Several indicators such as self-awareness, decision making, human resource development system, digital literacy, and technology adaptation showed excellent reliability. The reliability of other variables, such as self-management, organizational skills, collaborative school culture, technological vision, and data-driven decision making, demonstrated good reliability. In contrast, the

organizational support and work system, as well as participative governance, were within the acceptable range. Results were consistent and dependable, confirming that the instrument was reliable and appropriate for data collection.

Table 1
Cronbach's Alpha Reliability Test

Indicators	Cronbach's Alpha	Remarks
Self-Awareness	0.930	Excellent
Results Orientation	0.907	Excellent
Self-Management	0.889	Good
Decision Making	0.950	Excellent
Organization Skills	0.838	Good
Participative Governance	0.713	Excellent
Human Resource Development System	0.917	Excellent
Collaborative School Culture	0.851	Good
Organizational Support and Work System	0.714	Acceptable
Digital Literacy	0.910	Excellent
Technology Adaptation	0.904	Excellent
Technological Vision	0.866	Good
Data Driven Decision Making	0.841	Good

George and Mallery (2003) provide the following rules of thumb:"_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable"

Data Gathering Procedure - Prior to conducting the study, approval was secured from the Schools Division Office of Occidental Mindoro, as well as from the respective Public School District Supervisors to facilitate coordination with the school leaders in each district. The respondents were informed about the purpose of the study, the voluntary nature of their participation and the confidentiality of their responses. The questionnaire was administered through both online and printed formats. The online version was distributed via Google Forms through a link or QR code sent to respondents through their personal messenger and DepEd email accounts, while printed copies were provided to those with limited internet access. An informed consent statement was included, and only those who agreed were allowed to proceed. Respondents were given sufficient time to complete the questionnaire, after which all responses were collected for analysis.

Data Analysis - The collected data were checked encoded, and analyzed using the Statistical Package for the Social Sciences (SPSS). Weighted mean and standard deviation were used to determine the level of personal, organizational and digital leadership. Furthermore, the Spearman rho correlation coefficient was utilized to determine the relationship among personal, organizational, and digital leadership variables. All statistical tests were conducted using a 0.05 level of significance.

Ethical Considerations - While conducting the study, strict adherence to ethical considerations was made. There was no requirement in the questionnaire for any identifying details (such as names) to assure anonymity of participants. No other information was gathered than general demographic. Responses were kept confidential and exclusively reported in aggregate to not identify any respondents or institutions. The participation in the research was voluntary, and the respondents were allowed to discontinue at any point of the research. Only academic and research purposes were addressed with use of all data collected, following institutional policies. Data collected were used solely for academic and research purposes in accordance with institutional policies. Furthermore, the study successfully passed the review and was approved by the Ethics Review Committee prior to data collection.

3. Results and discussion

Findings indicate that all five dimensions fall between 3.62 and 3.70, creating an overall spread of just 0.08. Self-awareness ranks first at 3.70, while organizational skills rank last at 3.62, so the highest dimension exceeds the lowest by less than one-tenth of a point. Results orientation and decision-making tie at 3.65, while self-management follows closely at 3.64. This narrow distribution indicates that personal leadership is not fragmented; rather, it is uniformly high across the different dimensions. The ranking order still matters because it shows that reflective and internal leadership capacities slightly outrank implementation-oriented capacities such as

organization. Numerically, the table supported the interpretation that personal leadership is a broad strength of the respondents, with only modest developmental differences between dimensions.

Table 2
Summary Table on the Level of Personal Leadership of School Leaders

Dimensions	Composite Mean	VI	Rank
Self-Awareness	3.70	Strongly Agree	1
Results Orientation	3.65	Strongly Agree	2.5
Self-management	3.64	Strongly Agree	4
Decision making	3.65	Strongly Agree	2.5
Organizational Skills	3.62	Strongly Agree	5
Overall Composite Mean	3.65	Strongly Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 – 1.49 = Strongly Disagree

The ranking of self-awareness as the highest dimension suggested that the strongest area of personal leadership among the respondents lies in reflective understanding of self and of one's effects on others. This is a positive sign because self-awareness often serves as the entry point for growth in other leadership capacities. Reflective leaders are more likely to identify any gaps, to learn from failings, to be in control of their reactions, and to be receptive to developing their skills. The high ranking for the self-awareness component suggested that the school leaders are not simply work-oriented but are introspectively mindful and relationally mindful too. The following can help enhance the supervision resolution and ethical approach to decision making in schools.

Results orientation & Decision making is tied for second place, showing that respondents are reflective, and with a high degree of concern for results and decision making. This is essential link where reflection within action can be passiveness and action without reflection can be impulsive leadership. The summary pattern implies that the leaders in the division are attempting to balance purpose and process: they want to attain targets, and they are also willing to make decisions in order to move the school forward. These excellent ratings can be used to explain why school operations can be allowed to continue even in the most challenging environment. They also indicate that school leaders are being conditioned towards productivity and accountability which are becoming increasingly needed in a performance-driven school setting.

Another rating that is high is self-management. The respondents, overall, tend to believe that they have the capability to control themselves, endure and keep calm in tense situations. It is specifically applicable to the education area, where the leader has to deal with a variety of timelines, expectations of the stakeholders and unforeseen problems at all times. High self-management complements the other dimensions because it provides the emotional and behavioral steadiness required for leadership consistency. Meanwhile, organizational skills, although ranked last, still remain clearly favorable. This should not be interpreted as an area of poor performance. Rather, it indicates that compared with the inner and cognitive aspects of leadership, the more operational and time-management side of leadership may require more attention. This relative ranking is analytically useful because it points to where refinement efforts could be focused.

The result table is supported by literature emphasizing that school improvement is stronger when teachers and stakeholders are included in decision processes. UNESCO (2024) noted that effective leadership fosters collaboration and shared responsibility across the school community. Participative leadership practices among school heads were associated with more inclusive decision-making and stronger organizational engagement, indicating that consultation is a practical leadership strategy rather than a symbolic gesture (Villafane, 2025). These sources provide the interpretation of the present table that the participative governance is being used in contributing to the ownership, transparency and the smoother execution of school programs. The summary table suggests that the personal leadership profile of school leaders in the division is strongly visible but not uniform across dimensions. From a development perspective, this means that leadership programs should preserve and deepen the strong internal qualities already present while also strengthening execution-related habits such as time management, workflow organization and systematic monitoring.

In general, the consistently high ratings across all dimensions in the Division of Occidental Mindoro indicate

that school leaders have a balanced leadership capacity. However, slight variations in operational skills such as time management, recommend that targeted professional development programs may further enhance the overall effectiveness of leadership.

Table 3
Summary Table on the Extent of Organizational Leadership of School Leaders

Dimensions	Composite Mean	VI	Rank
Participative Governance	3.60	Strongly Agree	4
Human Resource Development System	3.62	Strongly Agree	3
Collaborative School Culture	3.67	Strongly Agree	1
Organizational Support and Work System	3.66	Strongly Agree	2
Overall Composite Mean	3.64	Strongly Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

School leaders exhibit an exceptionally high level of organizational leadership as evidenced by the mean score of 3.64. The dimension of collaborative school culture has the highest weighted mean (3.67). It demonstrated the significance of constructive relationships in improving academic performance (Leithwood et al., 2020). It is followed by organizational support and work system (WM = 3.66), which proposes that leaders maintained supportive work environments and provided sufficient resources. In contrast, the human resource development system (WM = 3.62) and participative governance (WM = 3.60) achieve the lowest means wherein there is room for further improvement (Bush, 2020). The data reveal that school leaders effectively administered school systems, supported personnel and promoted a positive work environment. This outcome provided further evidence by Hallinger (2018), he asserted that effective organizational leadership is indispensable for the enhancement of educational objectives and the enhancement of school efficiency.

The fact that collaborative school culture ranked first is highly significant. It suggests that among the organizational dimensions, the strongest emphasis lies in creating collegial relationships, open communication, respect, and a sense of belonging. This may be interpreted as evidence that the schools represented in the study place high value on interpersonal cohesion and emotional safety as foundations of work. A culture of collaboration is especially important in educational settings because teaching quality, program implementation and school improvement often depend on coordinated effort rather than isolated action. Therefore, the highest ranking of collaborative culture implies that the respondents understand leadership not only as directing others but also as building a community in which others are willing to work together.

Organizational support and work system ranked second, which means that respondents also perceive themselves as able to provide fair workloads, needed resources, and practical support structures for teachers and staff. This is a good effect as collaboration without changing the work systems it uses is too short a term. Leaders are trying to establish a positive culture that is 'workable organizationally', which is reflected in the relatively high score in this dimension. Human resource development also posted a favorable rating, suggesting that school leaders see value in helping teachers and staff grow. This implies that the organizational environment is not only supportive in a logistical sense but also developmental in orientation.

Participative governance ranked last, although it still remained strongly favorable. This relative position is important because it reveals that while consultation and collaboration are generally practiced, broader or more systematic participation in governance may be less developed than the relational and support aspects of organizational leadership. In many school contexts, leaders may be more comfortable encouraging teamwork and belonging than opening policy and governance processes to wider stakeholder participation. The ranking therefore points to a specific area where leadership can become more inclusive, transparent, and consultative, especially in matters that affect programs, policy interpretation, and long-term planning.

An exceptionally high level for organizational support and work system aligned with literature showing that leadership is partly expressed through the structures and supports that make teachers' work possible. OECD (2023) argues that effective working environments in schools depend on coherent policies, appropriate support systems,

and workable organizational arrangements. In the context of basic education, PPSSH explicitly expects school leaders to manage operations and resources in ways that sustain effective teaching and learning (DepEd, 2020). The current findings therefore fit the view that supportive work systems are a leadership output that helps maintain stability, morale, and continuity of school programs. The table suggests that the organizational leadership of school leaders in the division is characterized most strongly by culture-building and supportive work environments, while participatory governance represents the area with the greatest potential for strengthening. This is an encouraging pattern because it shows that the basic organizational climate is already positive. The developmental challenge is to deepen the democratic and participatory side of school leadership so that strong school culture is matched by equally strong shared governance and developmental systems.

Overall, the high level of organizational leadership of school leaders is indicative of a strong foundation in collaboration and support. Nevertheless, the inclusion and sustainability of school leadership practices may be further improved by strengthening structured development systems and increasing stakeholder participation.

Table 4

Summary Table on the Level of Digital Leadership of School Leaders

Dimensions	Composite Mean	VI	Rank
Digital Literacy	3.52	Strongly Agree	2.5
Technology Adaptation	3.50	Strongly Agree	4
Technological Vision	3.52	Strongly Agree	2.5
Data-driven decision making	3.53	Strongly Agree	1
Overall Composite Mean	3.52	Strongly Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

School leaders exhibit a high degree of digital leadership, as shown by the mean of 3.52 (Strongly Agree). The dimension of data-driven decision making had the highest weighted mean (3.53), indicating that school administrators were successful in using data to inform choices and raise student achievement. A weighted mean of 3.52 is found for both technical vision and digital literacy, suggesting that school administrators were capable of utilizing digital tools and encouraging innovation inside the school. Alternatively, technology adaptation received the lowest weighted mean (3.50), indicating difficulties in completely adjusting to quickly evolving digital advancements (Scherer et al., 2019). The highest ranking of data-driven decision making suggests that respondents perceive their strongest digital leadership contribution in the use of digital information, evidence, and technology-related data for planning and improvement. This is a promising result because it moves digital leadership beyond device use and into strategic management. It implies that school leaders recognize that technology must support informed judgment rather than exist as an isolated innovation. In other words, the respondents appear to see digital leadership not merely as operating tools but as using digital resources to improve outcomes, monitor performance, and guide school decisions.

Digital literacy and technological vision both receive strong ratings, indicating that respondents generally understand digital tools and also appreciate the need for a purposeful direction in technology use. These dimensions matter because leadership in digital environments depends both on competence and on vision. A leader may know how to use technology but fail to integrate it meaningfully; conversely, a leader may have a compelling vision but lack the operational confidence to make it real. The very similar rating of these dimensions could indicate that respondents have both a conceptual and a practical orientation towards digital change, although not necessarily at the highest level.

Technology adaptation receives the lowest ranking, although it still remained in the strongly agree category. This relative position is analytically important because adaptation is often the most difficult part of digital leadership. Knowing about technology and valuing it are not the same as consistently adjusting to new platforms, evolving systems, data security demands and emerging tools such as AI-assisted applications. The lower ranking implies that while respondents are generally capable in digital matters, the pace of technological change may still challenge the depth, confidence, or consistency of their adaptation. This is understandable in school contexts where technology infrastructure, internet stability, and training opportunities may vary considerably. The evidence points

to the conclusion that school leaders could use technology, direct creativity and apply data to teaching strategies and school administration. This confirmed with OECD's (2021) which stated that digital leadership is critical to modern education.

The division seems to be on the path to becoming digital leaders and this is indicated in the summary table, where formation is categorized as promising, functional and strategically relevant, with only partway developing adaptive dimension. The results suggest that school leaders are already aware of the importance of technology in education and are leveraging it to aid decision making and innovation. There is a need for additional investment in ongoing capacity building in digital literacy, assistance with practical adaptation and system-level ICT organization to support leaders to keep up with digital change. Thus, the table needs to be read as indicators of the meaningful aspects of digital leadership readiness along with a clear recognition of the need to keep upgrading to maintain future-ready school leadership. In general, findings indicate that despite the fact that school leaders exhibit strong digital leadership credentials, it is necessary to provide continuous support for technology adaptation and system-level digital integration in order to guarantee long-term sustainability and the ability to adapt to the rapidly changing landscape of educational technologies.

Table 5

Relationship Between Personal Leadership and Organizational Leadership of School Leaders

Self-awareness	rho-value	p-value	Interpretation
Participative Governance	0.796**	< 0.001	Highly Significant
Human Resource Development System	0.789**	< 0.001	Highly Significant
Collaborative School Culture	0.640**	< 0.001	Highly Significant
Organizational Support and Work System	0.825**	< 0.001	Highly Significant
Results Orientation			
Participative Governance	0.817**	< 0.001	Highly Significant
Human Resource Development System	0.850**	< 0.001	Highly Significant
Collaborative School Culture	0.647**	< 0.001	Highly Significant
Organizational Support and Work System	0.840**	< 0.001	Highly Significant
Self-Management			
Participative Governance	0.820**	< 0.001	Highly Significant
Human Resource Development System	0.827**	< 0.001	Highly Significant
Collaborative School Culture	0.645**	< 0.001	Highly Significant
Organizational Support and Work System	0.828**	< 0.001	Highly Significant
Decision Making			
Participative Governance	0.794**	< 0.001	Highly Significant
Human Resource Development System	0.804**	< 0.001	Highly Significant
Collaborative School Culture	0.623**	< 0.001	Highly Significant
Organizational Support and Work System	0.819**	< 0.001	Highly Significant
Organizational Skills			
Participative Governance	0.675**	< 0.001	Highly Significant
Human Resource Development System	0.676**	< 0.001	Highly Significant
Collaborative School Culture	0.858**	< 0.001	Highly Significant
Organizational Support and Work System	0.672**	< 0.001	Highly Significant

***Correlation is significant at the 0.01 level*

The table shows the personal leadership and organizational leadership of the school leaders. The computed rho values confirm positive correlations between all variables and p values < than 0.001 mean very strong relationships. Results indicated that personal leadership competencies were related to greater organizational leadership practices. These dimensions, for instance, self-awareness, results orientation, self-management, decision making and organizational skills, are significantly correlated with participative governance, human resource development and collaborative school culture and organizational support. Among these, we observed particularly high correlations between results orientation and human resource development ($\rho = 0.850$) and organizational skills and collaborative school culture ($\rho = 0.858$). Data point out that leaders who are well-organized and goal-oriented are more effective in fostering professional growth and collaboration within schools. Furthermore, these results suggest that effective organizational leadership is predicated on personal leadership. School leaders who were reflective, disciplined and strategic in their personal competencies were more capable of fostering teacher development, implementing inclusive governance and preserving a positive school environment.

The strength of several coefficients above .80 indicates especially strong associations. For example, results orientation is very strongly related to human resource development, and organizational skills are very strongly related to collaborative school culture. These patterns are meaningful. A results-oriented leader is likely to see staff development not as an optional activity but as a necessary investment for improving performance and achieving school goals. A similarly well-organized leader is better equipped to establish a consistent program, communication lines, and a structure that facilitates teamwork. This is why the leaders of effective schools tend to be models of personal discipline and clarity that schools reflect, and why the leaders of effective schools tend to be highly effective. The positive relationship between self-awareness and the organizational dimensions is also significant. Self-aware leaders are likely to be more reflective about how their behavior influences staff, more open to consultation, and more able to build trust-based systems. Similarly, self-management and decision-making show strong links with organizational leadership because schools depend on leaders who can regulate themselves, think carefully, and respond consistently to complex situations. In interpretive terms, the table suggests that organizational leadership is not separate from the leader's inner competencies. Instead, organizational leadership appears to be partly built on those competencies. Leaders who are thoughtful, disciplined, accountable, and organized are better able to create participative, supportive, and collaborative schools.

The practical implication of the correlations is that efforts to improve organizational leadership should not focus only on structures and systems. They should also invest in the personal development of leaders. For example, improving human resource development is a goal with potential benefits for a division that desires more collaborative school cultures and more effective human resource development, by improving the self-awareness, results orientation, and organization skills of leaders. This is crucial because if leaders don't have the internal capacities for effective implementation then structural reforms alone may fail. On the other hand, leaders developing themselves can find to bring widespread organizational improvement, without an initial change of the macro-structure. This corroborated the perspective of Hallinger (2018) who emphasized that effective school leadership is predicated on the development of personal competencies that result in enhanced organizational practices. At large, the evidence indicated that it was imperative to enhance personal leadership skills in order to enhance organizational leadership and enhance the overall performance of the school. Moreover, the profile-based differences in digital leadership aligned with literature showing that digital competence is influenced by learning opportunities, role demands and organizational expectations. UNESCO (2024) emphasizes that education systems need leaders with the right skills and vision and must prepare and support them accordingly. Mamon (2025) found that the digital literacy is closely connected with school heads' work performance, while Salazar et al. (2022) reported that school heads' technological leadership is positively linked to teachers' ICT integration. The interpretation that educational attainment and position can make meaningful differences in the capacity for digital leadership are supported by these sources.

The table provides very strong support for an integrated view of leadership. Personal Leadership must not be separated from Organization Leadership and must work in synergy to one another. The evidence indicates that the inner capacities of the leader influence the external working of the school and that the external working of the school influences the inner capacities of the leader. So, when analyzing the table, it becomes clear that there are two areas of focus needed to improve schools: the personal growth of the school leader and the organizational systems he or she manages. Leadership development programs that connect reflective practice, self-management, strategic thinking, and organizational design are therefore likely to be more effective than those that isolate these aspects from one another. In the Division of Occidental Mindoro, the observation indicates that the strong correlation between personal and organizational leadership implies that effective school management commences with the internal competencies of the leader. Organizational and collaborative school environments are more probable when leaders exhibit accountability, self-awareness and discipline. This suggests that organizational effectiveness can be directly impacted by upgrading leadership practices at the personal level. Given this, it is vital that leadership development programs within the division incorporate both personal growth and organizational management strategies in order to optimize educational outcomes.

Table 6
Relationship Between Personal Leadership and Digital Leadership of School Leaders

Self-awareness	rho-value	p-value	Interpretation
Digital Literacy	0.697**	< 0.001	Highly Significant
Technology Adaptation	0.690**	< 0.001	Highly Significant
Technological Vision	0.705**	< 0.001	Highly Significant
Data-driven decision making	0.699**	< 0.001	Highly Significant
Results Orientation			
Digital Literacy	0.750**	< 0.001	Highly Significant
Technology Adaptation	0.747**	< 0.001	Highly Significant
Technological Vision	0.751**	< 0.001	Highly Significant
Data-driven decision making	0.056**	< 0.001	Highly Significant
Self-Management			
Digital Literacy	0.734**	< 0.001	Highly Significant
Technology Adaptation	0.704**	< 0.001	Highly Significant
Technological Vision	0.720**	< 0.001	Highly Significant
Data-driven decision making	0.723**	< 0.001	Highly Significant
Decision Making			
Digital Literacy	0.717**	< 0.001	Highly Significant
Technology Adaptation	0.698**	< 0.001	Highly Significant
Technological Vision	0.731**	< 0.001	Highly Significant
Data-driven decision making	0.722**	< 0.001	Highly Significant
Organizational Skills			
Digital Literacy	0.627**	< 0.001	Highly Significant
Technology Adaptation	0.636**	< 0.001	Highly Significant
Technological Vision	0.635**	< 0.001	Highly Significant
Data-driven decision making	0.624**	< 0.001	Highly Significant

***Correlation is significant at the 0.01 level*

The positive correlation data in the table indicated that all variables had moderate to strong positive correlation with values ranging from 0.624 to 0.751 with all the $p<0.001$ which indicates that all values are highly significant. It suggests that there was a relationship between improved digital leadership skills and greater personal leadership. There is a significant correlation between self-awareness and digital literacy ($\rho = 0.697$), technology adaptation ($\rho = 0.690$), technological vision ($\rho = 0.705$), and data-driven decision-making ($\rho = 0.699$). Hence, reflective leaders were more effective in engaging with digital tools. The results orientation exhibited strong relationships with digital literacy ($\rho = 0.750$), technology adaptation ($\rho = 0.747$) and technological vision ($\rho = 0.751$) but a weak relationship with data-driven decision-making ($\rho = 0.056$).

The strong relationships involving results orientation are especially revealing. When results orientation is high, digital literacy, technology adaptation and technological vision also tend to be high. This suggests that leaders who are focused on outcomes are more likely to engage seriously with digital tools and to see technology as a means for achieving school goals rather than as an optional add-on. Goal-driven leaders may be more motivated to learn digital systems, monitor technology use, and translate digital innovation into practical school improvement. In this way, results orientation appears to energize the purposeful adoption of technology. It also found strong correlations with digital leadership dimensions for self-awareness, self-management and decision making. These trends suggest that leaders who are self-aware, have a self-regulation of response and make careful decisions are better equipped to interact with digital environments. This makes sense as the digital leadership in a world of fast change, troubleshooting, strategic choice, ambiguity and awareness of risk is often found within a world that is digital. A self-aware leader might be more willing to learn about new tools and his own digital blind spots. Frustrations of adaptation can propel the self-managing leader through. An effective decision maker will be able to make a better determination of the value of digital projects and the way that technology should be integrated to the learning goal.

There are also positive and significant relationships between organizational skills and all the digital dimensions, although they generally are at a lower level than some of the other personal dimensions. This still matters, because digital leadership often depends on planning, scheduling, coordination, delegation, and follow-through. Technology initiatives fail not only because of insufficient technical knowledge but also because of weak

implementation structures. The findings therefore suggest that digitally capable leadership requires both mindset and management. School leaders must be able to organize digital tasks, schedule training, monitor usage, and support staff if digital leadership is to move beyond rhetoric.

In the same vein, there were substantial correlations between organizational skills, decision-making and self-management across all dimensions. These findings supported the study of OECD (2021), which emphasized that strong leadership competencies are crucial in effectively integrating technology and advancing digital leadership. Such competencies enable school leaders to guide innovation, support teachers, and enhance overall school performance in technology-driven educational environments. Literature that considers school leadership as a complex of personal, relational, and structural capabilities provides evidence of the strong correlations between personal and organizational leadership. Day et al. (2021) suggest that effective school leadership is a combination of personal commitment, professional judgment, and organizational action to influence the school outcomes. The PPSSH also integrates strategic leadership, operational management, teaching and learning, self-development and relationship with others in one framework of school heads (DepEd, 2020). Therefore, the strong coefficients in this table are consistent with the idea that personal leadership qualities help school leaders exercise stronger organizational leadership in practice.

The table supports the idea that digital leadership should be developed on top of a strong base of personal leadership. Schools and divisions seeking to strengthen digital transformation should therefore avoid treating ICT training as a stand-alone intervention. Instead, digital leadership programs should integrate reflective leadership, self-management, evidence-informed decision making, and practical organization with technology-related competencies. This interpretation is especially useful because it reframes digital leadership not as a narrow technical specialty but as a leadership expression that grows stronger when the leader's personal foundations are also strong. There appears to be a strong relationship between personal and digital leadership in the setting of Schools Division of Occidental Mindoro. This suggests that school leaders that have high personal competencies might be in a better position to address the challenges that come with technological advancements. Self-managing, goal-focused, and reflective: The confident and purposeful use of digital tools is more common among self-managing, goal-focused, and reflective leaders where digital leadership is a multi-faceted concept that involves cognition, conduct, and technology. Therefore, it may be necessary to improve digital leadership practices inside the division by first enhancing personal leadership skills.

Table 7

Relationship Between Organizational Leadership and Digital Leadership of School Leaders

Participative Governance	rho-value	p-value	Interpretation
Digital Literacy	0.763**	< 0.001	Highly Significant
Technology Adaptation	0.748**	< 0.001	Highly Significant
Technological Vision	0.781**	< 0.001	Highly Significant
Data-driven decision making	0.759**	< 0.001	Highly Significant
Human Resource Development System			
Digital Literacy	0.612**	< 0.001	Highly Significant
Technology Adaptation	0.605**	< 0.001	Highly Significant
Technological Vision	0.614**	< 0.001	Highly Significant
Data-driven decision making	0.599**	< 0.001	Highly Significant
Collaborative School Culture			
Digital Literacy	0.786**	< 0.001	Highly Significant
Technology Adaptation	0.768**	< 0.001	Highly Significant
Technological Vision	0.792**	< 0.001	Highly Significant
Data-driven decision making	0.782**	< 0.001	Highly Significant
Organizational Support and Work System			
Digital Literacy	0.647**	< 0.001	Highly Significant
Technology Adaptation	0.586**	< 0.001	Highly Significant
Technological Vision	0.624**	< 0.001	Highly Significant
Data-driven decision making	0.676**	< 0.001	Highly Significant

***Correlation is significant at the 0.01 level*

The table shows that each of the variables had moderate to strong positive relationships with rho-values ranging between 0.586 and 0.792 and all p-values below 0.001 indicating very significant relationships. The statistics indicate that the more powerful the organizational leadership is associated with the greater digital leadership levels. Participative governance exhibits robust correlations with technological vision ($\rho = 0.781$), data-driven decision-making ($\rho = 0.759$), technology adaptation ($\rho = 0.748$), and digital literacy ($\rho = 0.763$), confirming that inclusive leadership facilitates the optimal integration of technology. This study also found that collaborative school cultures show strong relationships with technological vision ($\rho = 0.792$), which underscores the importance of collaboration in the promotion of innovation (Leithwood et al., 2020). At the same time, human resource development ($\rho = 0.599–0.614$) and organizational support ($\rho = 0.586–0.676$) exhibits moderate correlations, suggesting that they played a supportive role in the development of digital competencies.

The strongest relationships involved collaborative school culture and participative governance, especially in relation to technological vision. This suggests that schools are more likely to develop a clear and shared sense of direction for technology when leaders build collaboration and involve others in governance. Digital transformation in schools is rarely successful when imposed in a purely top-down manner. Teachers, staff, and other stakeholders need to understand, contribute to, and eventually own the direction of technology use. Therefore, the strong relationship between the participative and collaboration dimension of organization, and the technological vision, presupposes that the inclusion and collegial nature of the organizational environment contributes to the process of turning the digital goals into the meaningful and actionable ones at the school level.

The development system of human resources also exhibits positive and significant relationships with all the digital dimensions of leadership but to a more moderate degree. This is still a very meaningful finding. It suggests that staff development matters for digital leadership, but its influence may depend on how it is enacted and connected to broader organizational conditions. Training by itself may not produce the strongest digital outcomes unless it is supported by collaboration, follow-through, and a supportive work system. In interpretation, this means that professional development is a necessary but not sufficient condition for digital leadership growth. It becomes more effective when embedded in a coherent organizational culture. Organizational support and work system likewise show significant positive relationships with all digital dimensions. This confirms that fair workloads, resource provision, supportive policy implementation, and enabling structures are important to digital leadership. Technology cannot be integrated effectively when teachers are overburdened, when systems are confusing, or when support mechanisms are weak. The relationship indicates that digital leadership is partly a systems issue: leaders who design better work environments and support structures are more likely to see stronger digital practices in their schools.

In accordance with the study of Hallinger (2018), this established the importance of leadership structures and professional support systems in enhancing the efficacy of schools. At large, the results corroborated by Bush's (2020) assertion that effective organizational leadership established the necessary conditions for the successful integration of digital practices in schools, as well as for innovation and adaptability. Furthermore, the strong positive relationship between personal leadership and digital leadership is consistent with literature showing that digital leadership rests on more than technical skill alone. UNESCO (2024) highlights that leaders need a combination of personal and professional capacities to guide schools through technological change, while the ISTE standards position digital leadership as a strategic, ethical, and collaborative endeavor (International Society for Technology in Education., 2024). Digital literacy and technological leadership among school heads are connected with work performance and ICT integration in schools (Mamon, 2025; Salazar et al., 2022). These sources support the present interpretation that stronger personal leadership can provide the foundation for stronger digital leadership.

Data supports the interpretation that digital leadership is an organizational achievement as much as an individual one. For this reason, efforts to strengthen digital leadership in the division should include not only ICT upskilling but also organizational reforms that make innovation easier to implement and sustain. The table therefore suggests the study's broader message: effective leadership in schools is interconnected, and

organizational conditions are essential for the flourishing of digital leadership.

School systems that are supportive of technology integration are crucial in the context in the Division of Occidental Mindoro for having the strong correlation between organizational leadership and digital leadership. It is more probable that digital initiatives will be successfully implemented in schools that encourage collaboration, shared decision-making and established support mechanisms. As a result, this promotes that the organizational environment is important as individual ability when it comes to digital transformation. Consequently, digital leadership in the division may be more successful and last longer if school structures and support systems are improved.

Table 8
Proposed Leadership Development Program for Strengthening School Leaders' Personal, Organizational and Digital Leadership

Key Results Area	Objectives	Activities/ Strategies	Persons Involved	Desired Outcome
1. Personal Leadership a. Organizational Skills b. Self-Management c. Decision-Making	a. Organizational Skills To improve time management and task organization among school leaders. b. Self-Management To enhance emotional regulation and self-discipline in handling leadership responsibilities. c. Decision-Making To strengthen data-driven and situational decision-making skills.	Conduct seminars and workshops on time management, stress management, and decision-making using case analysis; implement coaching and mentoring programs.	School Leaders, School Administrators, Human Resource Managers	Improved time management and task completion; enhanced emotional control and leadership consistency; improved quality of decisions based on data and situational analysis.
2. Organizational Leadership a. Participative Governance b. Human Resource Development System c. Organizational Support	a. Participative Governance To enhance stakeholder participation in school decision-making processes. b. Human Resource Development System To strengthen professional development and mentoring programs for teachers. c. Organizational Support To improve work systems and support mechanisms within the school.	Conduct training on participative governance, HR development planning, and organizational systems improvement; establish feedback mechanisms and collaborative decision-making structures.	School Leaders, School Administrators, Teachers, Stakeholders	Increased stakeholder participation; improved staff development programs; enhanced organizational support systems and collaboration
3. Digital Leadership a. Technology Adaptation b. Digital Literacy c. Technological Vision	a. Technology Adaptation To improve adaptability to emerging digital technologies. b. Digital Literacy To enhance ICT knowledge and skills among school leaders. c. Technological Vision To strengthen strategic planning and innovation in technology use.	Conduct ICT capacity-building programs, technology adaptation workshops, and digital leadership seminars; provide hands-on training and peer mentoring.	School Leaders, ICT Coordinators, DepEd Officials	Improved ICT integration in school operations; increased confidence in using digital tools; strengthened technology-based decision-making and innovation.

4. Conclusions and recommendations

The study's findings lead to the following conclusions: The school leaders demonstrated a very high level of personal leadership across all dimensions, with self-awareness as the highest and organizational skills as the lowest, indicating strong reflective competencies supported by consistent performance in results orientation, decision-making and self-management. The school leaders exhibited a very high extent of organizational leadership across all dimensions, particularly in collaborative school culture as the highest and participative governance as the lowest, indicating strong emphasis on collaboration and support systems. The school leaders demonstrated a high level of digital leadership across all dimensions, with data-driven decision-making ranked highest and technology adaptation lowest, highlighting effective use of digital data while underscoring the necessity to enhance adaptability to evolving technologies. There were highly significant positive relationships among personal, organizational, and digital leadership of school leaders, signifying that stronger personal leadership is associated with more effective organizational and digital leadership practices. A professional development was proposed to enhance the personal, organizational, and digital leadership of school leaders in support of continuous

improvement in school management and instructional leadership

Based on the conclusions of this study, the following recommendations are proposed: Teachers may actively participate collaborative decision-making, professional learning communities, and ICT integration initiatives, thereby contributing to a stronger collaborative school culture and supporting the implementation of school programs. School leaders may strengthen their leadership practices by enhancing time-management, participative governance and technology adaptation while engaging in reflective and data-driven approaches to sustain school improvement. School administrators may institutionalize structured leadership development programs, mentoring systems and monitoring mechanism to strengthen organizational, digital and participatory leadership practices. DepEd officials may design and support policies aligned with PPSH and BEDP 2030 to strengthen leadership development and digital capacity-building across schools. Future researchers may conduct further studies across different contexts and variables to validate and expand the findings of the study.

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