

Transformational Leadership Principles in Promoting Quality School Learning Environment

Leoncia H. Silva

0323-0272@lspu.edu.ph

^aElementary School Teacher III, Candelaria, Quezon. 4323, Philippines

Abstract

In fifteen (15) public elementary schools in Candelaria East District, Candelaria, Quezon, this study investigated the extent of transformational leadership principles and their connection to the perceived quality school learning environment. The results, which were obtained using a quantitative method, showed that school leaders continuously exhibit a very high degree of transformational leadership in all areas, such as idealized influence, intellectual stimulation, inspirational motivation, and customized concern. This suggests that leaders successfully set an example of moral behavior, convey specific objectives, uplift and encourage educators, foster critical thinking, and offer tailored assistance for professional development. In terms of classrooms, water and sanitation facilities, ICT resources, and building safety and condition, the quality school learning environment was typically high, demonstrating that these areas are favorable to teaching and learning. Libraries and laboratories, on the other hand, received just an average rating, indicating a lack of equipment, resources, and upkeep. Additionally, the study discovered a significant correlation between transformational leadership and the standard of the school learning environment, indicating that effective leadership methods lead to better educational conditions. Overall, even if the learning atmosphere is generally encouraging, better laboratories and library facilities are required to provide a more harmonious and productive learning environment.

Keywords: Idealized Influence, Inspirational Motivation, Intellectual Stimulation, Transformational Leadership Principles, Quality School Learning Environment

1. Introduction

It is generally regarded as one of the key pillars of development within any country, due to the fact that education lays down the foundations for the development of the human resource potential of the country. The physical environment of the school or classroom setting is generally considered an important aspect that ensures that conducive conditions are provided to ensure that both the teacher and the learner achieve the required goals in terms of education. Good classrooms and good buildings form some of the key factors that lead to productivity in a learning environment (Admiraal, 2019). However, in many developing countries, there have always been issues concerning the provision of adequate facilities in public primary schools (González-Falcón, 2019).

Through the K to 12 programs, DepEd has made significant steps in ensuring access to education. There is a huge gap when it comes to the state of infrastructure facilities in the various schools. The gap is even wider in municipal areas where financial resources are very few (Himeur, 2022). Issues of overcrowding of classrooms, dilapidated buildings, inadequate sanitation infrastructure, and lack of technology have been experienced in rural and semi-urban schools. These issues interfere with the learning process and create a disparity amongst the learners (Kober & Rentner, 2020). Considering the fact that education is a fundamental right for all Filipino children, addressing the infrastructural challenge in public elementary schools has become an important matter. Leadership has been cited as one of the variables that lead to good schools. In particular, transformational leadership has gained prominence as a management approach that inspires innovation, mobilizes resources, and cultivates a shared vision among stakeholders (Lokuge, 2019). It can be said that Transformative Leadership Theory should be used in the described situation because it is extremely important to create an environment in which people like teachers and parents cooperate for bringing about changes in the sphere of education. Trust building, involvement of people, and being a good example are just some of the main things that make transformational leaders successful.

Another instance relating to the above-mentioned case where the issue arises on the need for creating an optimal learning environment is the Municipality of Candelaria, Quezon. It should be noted that despite the Municipality of Candelaria being regarded as one of the most advanced municipalities in the Province of Quezon, it cannot be denied that there are indeed

certain problems that have been faced by the public schools in the locality, one of which is the lack of an effective learning environment and poor ventilation.

The purpose of this study is to conduct a review of the theory of transformational leadership as far as quality is concerned. An attempt will be made to ascertain the effectiveness of the model of transformational leadership employed by school administrators in mobilizing resources and ensuring that there is engagement among various stakeholders in addition to ensuring that the infrastructure of the school remains intact. This study will not only contribute to the existing literature in leadership but will prove valuable to policymakers and educators alike.

2. Conceptual Framework

Importance of theoretical framework should not be underestimated when talking about educational research since the latter depends heavily on the former in the sense that it constitutes the very basis of the whole understanding of the processes of leadership, organizational change, and learning environment development. In relation to the current research where the topic under discussion is transformational leadership and its role in the development of the learning environment in schools, it becomes necessary to identify certain theoretical frameworks that will help in comprehending the motivation of an individual by the leader.

The theory underlying this paradigm is based on the transformational leadership theory by Bass & Riggio (2006). According to the theory, effective leadership involves inspiring the followers through idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. The theory will be significant in the research because it will enable understanding of the ways through which school administrators will provide an environment for improved attitude among teachers.

Another theory that can be applied in this respect is the Resource Mobilization Theory developed by McCarthy & Zald (1977). This theory suggests that effective use of resources is very crucial in attaining organizational objectives. In this respect, therefore, the Resource Mobilization Theory will play a significant role in analyzing the impact of school administrators on resource mobilization.

Moreover, the School Improvement Capacity Framework developed by Harris & Hopkins (2003) stresses the importance of building up internal capacity in the school through collaboration, vision sharing, and professional development. Application of this framework is connected with the results of the current study that have confirmed the idea of transformational leadership as the way to build up teachers' capacity, stimulate collaboration and improve school improvement initiatives. At the same time, application of the School Improvement Plan (SIP) will contribute to empowerment of schools to concentrate on improving the learning environment.

Considering all this, it becomes evident that the concepts discussed above prove that transformational leadership is critical in ensuring resource mobilization, capacity building, and development of motivation among teachers. With the help of strategic planning and effective leadership, schools become well-equipped to create an environment of safety, creativity, and support for their learning processes.

3. Methodology

3.1. Research Design

Descriptive-quantitative research design is a methodological approach that seeks to systematically describe the characteristics, behaviors, and patterns of a given population using numerical data. Authors describe it as a design that enables researchers to collect quantifiable information, analyze it statistically, and present findings in a way that reveals trends and relationships among variables. Studies claim that this design is particularly useful when the goal is to describe the current status of a phenomenon and determine possible correlations between factors.

This study adopts a descriptive-quantitative research design because it seeks to determine the extent of transformational leadership principles and its relationship in promoting quality school learning environment in Candelaria East District in Candelaria, Quezon. By utilizing this design, the study can generate numerical data from survey responses, which will then be analyzed statistically to identify patterns, levels, and relationships. The research design is appropriate for this research because it will aid the researcher in establishing the level of application of transformational leadership theories and determine how quality a school learning environment is. The researcher will use this type of research design to determine the importance of the relationship between the level of application of transformational leadership theories and creation of a quality school learning environment. Application of this research design will ensure the validity of the results.

3.2. Respondents of the Study

Subjects involved in this study may come from selected teachers of fifteen (15) schools in Candelaria East district of Candelaria, Quezon. Different viewpoints about the theory on transformational leadership and quality learning will be taken into consideration due to the presence of different respondents.

Some of the approaches that are going to be used in selecting a sample for this study include the techniques that will be employed in the application of the purposive sampling method. The reason why this sampling approach is going to be used is because all the members of the sample population are not equally knowledgeable about the subject matter.

The 200 respondents were chosen from a sample of 333 teachers from fifteen public elementary schools in Candelaria East District like Kinatihan I, Kinatihan II, Malabanban Norte, Malabanban Sur, Mangilag Norte, Mangilag Sur, Masalukot IV, Masalukot V, Mayabobo, NAVES, Pahinga Norte, Pahinga Sur, San Anders, Sta. Catalina Central and Sta. Catalina Norte.

3.3 Research Instrument

To facilitate the gathering of information the researcher used the descriptive-quantitative research design which was distributed to teachers via google forms as her respondents. The instruction of the questionnaire was the result of long validation and improvement. The questionnaire was divided into three parts as follows:

Part I. (Profile of the Respondents). The instrument stimulated information about the person related information of the classroom executives. The researcher constructed the instrument through the assistance of research adviser for the demographic profile as to age, gender, civil status, educational attainment and length of service.

Part II. (Transformational Leadership Principles) The instrument allocated on the extent of transformational leadership principles in promoting quality school learning environment in terms of the following four dimensions – 1. Idealized Influence (Ethical Behavior, Vision Articulation, Role Modeling), 2. Inspirational Motivation (Optimism, Team Spirit Encouragement, Emotional Appeal), 3. Intellectual Stimulation (Questioning Assumption, Problem – Solving Support, Fostering Critical Thinking), and 4. Individualized Consideration (Personalized Feedback, Support for Development, Respect Individual)focusing on ethical behavior, vision articulation, role modeling, motivation, critical thinking, and individualized support for teachers.

Part III (School Learning Environment) The instrument assesses the perceived level of quality school learning environment in terms of classrooms, libraries and laboratories, sanitation and water facilities, ICT resources and equipment, and the safety, accessibility, and physical condition of buildings.

The data that is to be obtained through the survey is to be assessed using a five-point rating scale, whereby the results are to be evaluated depending on the level of their interpretation in the following manner: 5 – Strongly Agree = Very High (4.50 - 5.00); 4 – Agree = High (3.50 - 4.49); 3 – Moderately Agree = Average (2.50 - 3.49); 2 – Disagree = Low (1.50 - 2.49); 1 – Strongly Disagree = Very Low (1.00 - 1.49).

The survey questionnaire was collected and validated by the experts in the field of education. Their comments and suggestions were used to modify the content of the research instrument.

The instrument designed by the researcher underwent validation. It was given to five (5) external validators, one (1) Principal III and Graduated in Doctor of Education Major in Educational Management, one (1) Principal II and have a Units in Doctor of Philosophy in Education Major in Educational Management, and three (3) Principal I. The comments and suggestions of the validation were incorporate in the revision of the instrument.

Another four (4) internal validators composed of Research Panel put comment or suggestions regarding the research instrument. It was revised and finalized to be sure that it contained all the pertinent information and data needed in the investigation.

To test reliability, the instrument was subjected to test-retest method to Twenty (20) teachers answered the instrument. After one (1) week, the questionnaire was collected to compute its reliability using Cronbach's Alpha.

3.3. Research Procedure

The researcher made the final revision with the help of the research adviser on the questionnaires to be distributed. Then, a permission from the Schools Division Superintendent and District Supervisor was sought before the administration of the questionnaires to the teacher. Upon approval, adequate copies of the questionnaires were sent by the researcher via google forms to the respondents. The assistance of the school principals was solicited to ensure success in the retrieval of the questionnaires. The accomplished questionnaires were collated, tallied, enclosed and was submitted to the statistician for the statistical treatment of data.

3.4. Data Analyses

Several statistics were utilized to present, analyzed and interpret the data gathered. Mean and standard deviation were used to determine the extent of transformational leadership principles and perceived level of quality school learning environment.

To determine the significant relationship between the transformational leadership principles and promoting quality school learning environment, Pearson Product – Moment Correlation Coefficient at .05 level of confidence was utilized.

4. Result and Discussion

Table 1.

Summary of the Extent of Transformational Leadership Principles

Indicators	Mean	SD	Interpretation
1. Idealized Influence	4.57	0.48	Very High
2. Inspirational Motivation	4.58	0.52	Very High
3. Intellectual Stimulation	4.53	0.52	Very High
4. Individualized Consideration	4.53	0.51	Very High
Over All	4.56	0.51	Very High

Legend: 4.50-5.00 - Very High 3.50-4.49 – High 2.50-3.49 – Average 1.50-2.49 – Low 1.00-1.49 – Very Low

The extent to which school heads apply transformational leadership principles in fostering a high-quality learning environment is summarized in Table 17. With overall mean scores ranging from 4.53 to 4.58 and comparatively low standard deviation values ranging from 0.48 to 0.52, the statistics show that all elements of transformational leadership received a very high interpretation, showing consistency in the teacher-respondent's comments. Inspirational Motivation had the highest mean of 4.58 with a standard deviation of 0.52, which is considered to be very high. This indicates that school administrators strongly encourage, inspire, and motivate teachers to achieve school objectives and improvement activities. This suggests that transformational leaders successfully foster teamwork, excitement, and optimism in the classroom, which helps to create a more upbeat and cooperative environment that is favorable to teaching and learning. Next was the Idealized Influence category, which had an extremely high mean score of 4.57 and standard deviation of 0.48. This indicates that there is presence of moral leadership among the school administrators who can clearly articulate their vision as well as provide a model for teachers to imitate. This suggests that school administrators of Candelaria East District are respectable people whose positive behavior affects that of the teachers.

As opposed to this, individualized consideration and intellectual stimulation attained averages of 4.53 with SD of 0.52 and 0.51, respectively, both being very high scores. It can be stated that such results require school heads to continually encourage teachers in developing their capacity for critical thinking, creativity, innovation, and involvement in innovative practices as well as provision of professional consultations and support tailored specifically to individual cases. The low SD scores indicate that there was consistency in views of respondents concerning transformational leadership styles practiced by their school heads. The overall average score of 4.56 together with the SD of 0.51 further prove the popularity of transformational leadership practices among school administrators that are believed to contribute greatly to the creation of collaborative and conducive learning environment.

The findings confirm the research Educational Leadership by Leithwood, Harris, and Hopkins (2019), where it was stated that there is a significant impact of good school leadership on the results of students' education, teacher motivation, and improvement within the organization. Transformative leadership helps to make school management effective by fostering cooperation, trust, and development among teachers. Moreover, the findings are supported by the research of Leithwood, Sun, and Schumacker (2020), who found out that instructional support, organizational capacity, and supportive school environment serve as the three main factors that influence students' learning and school improvement. Moreover, leadership practices such as intellectual stimulation, motivation, and individualized help create opportunities for creating effective educational environments.

Table 2 .*Summary of the Perceived Quality School Learning Environment*

Indicators	Mean	SD	Interpretation
1. Classroom	4.39	0.58	High
2. Libraries and Laboratories	3.37	1.11	Average
3. Sanitation and Water Facilities	4.40	0.58	High
4. ICT Resources and Equipment	3.79	0.84	High
5. Safety, Accessibility and Physical Condition of Buildings	4.41	0.55	High
Over All	4.07	0.73	High

Legend: 4.50-5.00 - Very High 3.50-4.49 – High 2.50-3.49 – Average 1.50-2.49 – Low 1.00-1.49 – Very Low

The perceived quality of the school learning environment in Candelaria East District in regard to transformational leadership principles is shown in table 23. The majority of school facilities are generally safe, effective, and conducive to teaching and learning, as indicated by the high overall rating of the school learning environment (overall mean = 4.07, SD = 0.73). In particular, sanitation and water facilities ($M = 4.40$, $SD = 0.58$) and safety, accessibility, and physical condition of buildings ($M = 4.41$, $SD = 0.55$) received the highest scores, indicating that schools are well-maintained in terms of structural conditions, health, and safety. Similar high ratings were given to classrooms ($M = 4.39$, $SD = 0.58$) and ICT resources and equipment ($M = 3.79$, $SD = 0.84$), indicating sufficient learning areas and technological support for instruction. The libraries and laboratories got an average score ($M = 3.37$, $SD = 1.11$), due to the fact that there was disagreement amongst the respondents about their status, coupled with the scarcity of particular learning materials that could help the students. This proves beyond doubt that the process of developing school infrastructure is unequal, focusing on the classrooms and security.

These findings point to the fact that while the general environment of the school can be quite conducive to learning, there is need for improvements in libraries and laboratories to create an integrated learning environment. As this plays a direct role in enhancing performance levels in academics, teacher effectiveness and learner engagement, having an integrated and conducive learning environment is very important. Even though these are not entirely influential to learning, it has been shown through research that physical learning environments have a large effect on learning experiences and performance. Stephen Horne-Martin emphasizes the importance of a conducive learning environment for effective instruction, as he explains the role played by classroom environments in facilitating instructional processes. On similar lines, a study conducted on educational facilities in the Philippines showed strong correlations between good literacy and educational performance and sufficient resources for learning, including classrooms, libraries and technological resources among others.

In addition, through fostering team spirit, improving school environment, and using resources effectively, the application of transformational leadership theory plays an important role in improving school environment as argued by new research in education management. As stated in a systematic review, the use of transformational leadership by school principals significantly improves learning environments by fostering enthusiasm among students and teachers.

Overall, the results show that while transformational leadership can help improve the learning environment in schools, ongoing investment in physical infrastructure—especially libraries and labs—is required to fully support an excellent, fair, and successful educational system.

Table 3.

Correlation Between the Transformational Leadership Principles and Promoting Quality School Learning Environment

Transformational Leadership Principles	Quality School Learning Environment					
	Classroom	Libraries and Laboratories	Sanitation and Water Facilities	ICT Resources and Equipment	Safety, Accessibility, and Physical Condition of Buildings	Overall Quality School Learning Environment
1. Idealized Influence	.495**	0.145	.439**	.358**	.477**	.462**
1.1. Ethical Behavior	.436**	0.097	.384**	.306**	.390**	.385**
1.2. Vision Articulation	.482**	0.142	.431**	.346**	.480**	.453**
1.3. Role Modeling	.490**	.176*	.432**	.368**	.482**	.476**
2. Inspirational Motivation	.486**	.155*	.476**	.344**	.472**	.467**
2.1. Optimism	.465**	0.097	.399**	.305**	.389**	.394**
2.2. Team Spirit Encouragement	.462**	0.140	.454**	.312**	.462**	.439**
2.3. Emotional Appeal	.435**	.183*	.478**	.346**	.427**	.459**
3. Intellectual Stimulation	.502**	.228**	.475**	.381**	.494**	.515**
3.1. Questioning Assumption	.501**	.217**	.437**	.373**	.466**	.494**
3.2. Problem-Solving Support	.504**	.228**	.498**	.377**	.476**	.515**
3.3. Fostering Critical Thinking	.467**	.221**	.451**	.365**	.500**	.496**
4. Individualized Consideration	.485**	.169*	.501**	.354**	.486**	.483**
4.1. Personalized Feedback	.474**	.172*	.485**	.335**	.478**	.471**
4.2. Support for Development	.486**	.169*	.496**	.362**	.490**	.486**
4.3. Respect Individual	.465**	.156*	.484**	.341**	.457**	.460**

Legend: ** Correlation is significant at 0.01 level
*** Correlation is not significant at 0.05**

With coefficients ranging from low to moderate (e.g., $r = .306$ to $.515$), the correlation matrix in table 24 shows a consistently positive and statistically significant relationship between transformational leadership principles and the quality of the school learning environment. This suggests that better environmental conditions in schools are linked to stronger leadership practices. Intellectual stimulation has the strongest overall relationship ($r = .515$) with the learning environment among the dimensions, especially when it comes to encouraging effective classroom practices ($r = .502$) and improving problem-solving support ($r = .504$). This implies that those initiating innovations, criticisms, and problem-solving skills are vital in ensuring the success of learning institutions. The first attribute having high correlation coefficient values to the school safety, sanitation, and class is the Idealized Influence ($r = .462$) and Inspirational Motivation ($r = .467$). It therefore implies that some of the attributes vital in creating an environment conducive for learning are morality, vision, optimism, and cooperation. The last but perhaps the most vital attribute is that of Individualized Consideration ($r = .483$), including ICTs equipment ($r = .354$) and sanitation ($r = .501$).

These interactions can occur in local school environments, such as public primary schools situated in the vicinity of Candelaria East district, where the administrators of the schools will have to make sure that they include the teachers in the decision-making process for better use of resources and classroom arrangements. In order to improve learning delivery, a supportive school administrator who takes part in problem solving could, for example, encourage the teachers to solve the problem of inadequate ICT resources among themselves so as to guarantee equal sharing of such devices. Additionally, a school administrator that is more concerned with behaving ethically and serving as a role model can help build accountability when it comes to hygiene in the learning environment. The low correlations between leadership and laboratory/library ($r = .145$ to $.228$) can mean that while leadership fosters growth, there are certain constraints such as lack of funding and poor development of infrastructure. This result is consistent with research showing that transformational leadership has a major impact on teacher performance and school atmosphere, but it may have little direct effect on resource-intensive facilities without outside assistance (Leithwood et al., 2017; Hallinger, 2018).

Base on the point of view of the teacher respondents, leadership has a big impact on school culture and practices, there is a strong correlation between transformational leadership and a high-quality school learning environment. By inspiring teachers with a clear vision, moral conduct, transformational leaders enhance teamwork and productivity. Additionally, they foster creativity and creative thinking which results in improved teaching methods. They improve overall school learning environment by efficiently allocating resources and attending to the particular requirements in instructions. Thus, transformational leadership contributes to the development of a constructive, encouraging and productive learning environment for both educators and learners.

These findings are consistent with recent research by Nguyen et al., (2021), transformational leadership has a favorable impact on students learning outcomes, school atmosphere and resources usage. Likewise, Leithwood et al., (2017), transformational leadership techniques, especially intellectual stimulation and personalized attention, boost teacher engagement and raise the standard of learning environment as a whole.

Overall, the results show that transformational leadership principles is essential for creating quality learning environment in schools by influencing behavior, encouraging teamwork, and directing ongoing development. While weaker correlations in resource-heavy sectors emphasize the need for institutional and systemic support, greater correlations in the classroom, sanitation, and safety domains show that leadership techniques are more instantly effective in areas requiring human interaction and supervision. These results support the idea that good school leadership, when in line with available resources and contextual realities, is a social and organizational driver of educational excellence.

5. Summary of findings, conclusions, and recommendations

5.1 Summary of Findings

The salient findings of the following are as follows:

1. All domains consistently have very high levels of transformational leadership principles (Mean = 4.50–5.00). Under Idealized Influence, leaders establish direction and trust in the school by demonstrating strong ethical behavior, articulating their goal clearly, and setting an effective example. High levels of optimism, team spirit encouragement, and emotional appeal are indicative of a leader's capacity to inspire, motivate, and foster a supportive and cooperative environment. Similarly, Intellectual Stimulation demonstrates how leaders actively encourage inquiry, critical thinking, and problem-solving, which fosters creativity and reflective practices among educators. Lastly, leaders' dedication to meeting the special needs and professional development of teachers is demonstrated by the extremely high ratings under Individualized Consideration for individualized feedback, support for development, and respect for persons.

2. The quality school learning environment is generally high (Mean = 3.50–4.49), in terms of classroom conditions, sanitation and water facilities, ICT resources and equipment, and the safety, accessibility, and physical state of buildings suggesting that these areas are practical, secure, and conducive to teaching and learning. Libraries and labs, on the other hand, only earned an average rating (Mean = 2.50–3.49), indicating resource, facility, and maintenance constraints that can impede

the best possible learning opportunities. Although the majority of the school environment is favorable to students' learning and wellbeing, upgrades to the library and laboratory facilities are required to create a more well-rounded and completely helpful learning environment.

3. There is a significant relationship between transformational leadership and the quality of the school learning environment in Candelaria East District. It shows stronger leadership practices are linked to better classroom conditions, sanitation and water facilities, ICT resources, and school safety, all of which are rated high, libraries and laboratories on the other hand, received just average ratings, suggesting areas that require work. Overall, even if transformational leadership plays a significant role in fostering a positive and encouraging learning environment, more attention must be paid to enhancing particular facilities in order to create a more harmonious and productive learning environment.

5.2. Conclusions

The following are the conclusions of the study.

1. It is revealed that there is a significant relationship between the transformational leadership principles in terms of idealized influence and the promoting quality school learning environment. Therefore, the hypothesis is not sustained.
2. It is revealed that there is a significant relationship between the transformational leadership principles in terms of inspirational motivation and the promoting quality school learning environment. Therefore, the hypothesis is not sustained.
3. It is revealed that there is a significant relationship between the transformational leadership principles in terms of intellectual stimulation and the promoting quality school learning environment. Therefore, the hypothesis is not sustained.
4. It is revealed that there is a significant relationship between the transformational leadership principles in terms of individualized consideration and the promoting quality school learning environment. Therefore, the hypothesis is not sustained.

5.3. Recommendations

Based on the findings and conclusion, the following recommendations are proposed:

1. In particular, intellectual stimulation, idealized influence, inspirational motivation, and individualized consideration showed significant positive relationships with classroom conditions, sanitation and water facilities, ICT resources, and school safety. Therefore, school heads should maintain and further strengthen transformational leadership practices. The very high correlation values show that leadership actions like encouraging critical thinking, setting an example of moral behavior, inspiring educators, and offering tailored support directly improve learning environments. To preserve and improve these successful practices, ongoing leadership development and training programs may be advised.
2. As problem-solving assistance and challenging presumptions are correlated with the overall quality of the school learning environment, school administrators may increase the use of intellectual stimulation techniques. This may imply that promoting creativity, group problem-solving, and introspective activities among educators greatly enhances learning environments. To further increase this influence, school administrators are advised to institutionalize action research, professional learning communities, and cooperative planning sessions.
3. The results suggest that teachers are more successful in preserving and enhancing their workplace when they feel guided and supported. Therefore, it is important to regularly administer needs-based training, coaching sessions, and mentorship programs.
4. To increase group participation, initiatives including recognition programs, team-building exercises, and participatory decision-making may be advised.
5. In order to obtain more funding, modernize facilities, and guarantee appropriate maintenance systems, school administrators may be advised to work with local government entities, stakeholders, and corporate partners.
6. The results show that structural improvements need more institutional support, even while transformational leadership principles successfully enhance the human and organizational aspects of the quality school learning environment. Systemic and financial support may be provided by education authorities and policy makers to promote leadership initiatives, especially in resource-intensive sectors like labs and libraries.

Acknowledgements

The researcher would like to extend her deepest gratitude to the following people for their great contribution in the accomplishment of this study.

Hon. MARIO R. BRIONES, University President and Chairman of the Panel of Examiners, for his special concern to finish this thesis, and his support and guidance;

Atty. RUSHID JR. S. SANCON, Laguna State Polytechnic University Vice – President for Academic Affairs for sharing his insights to finish the study;

Engr. MANUEL LUIS A. ALVAREZ, Campus Director for his enduring leadership and supervision of Laguna State Polytechnic University San Pablo Campus;

Dr. EDILBERTO Z. ANDAL, Dean of the Graduate Studies and Applied Research for his helping out and review of this thesis.

Dr. EDNA O. BRIONES, Former Associated Dean of the Graduate Studies and her adviser, for imparting her expertise of this thesis through her intelligent suggestions, for all the guidance, patience and encouragement towards the completion of this undertaking.

Dr. EDEN C. CALLO, Former Vice – President for Academic Affairs and her subject specialist for her detailed review and pieces of advice during the thesis presentation;

Dr. EVA F. PUYO, her statistician, for sharing her expertise and for assisting her in the interpretation and analysis of statistical data;

Dr. JULIE FE D. PANOY, her technical editor for the help and special concern to the study.

ROMMEL C. BAUTISTA, CESO V., her Schools Division Superintendent in Division of Quezon Province for his assistance and giving permission to conduct the study in Candelaria East District, one of the schools under DepEd Quezon;

RAQUEL P. MARCUAP, her district supervisor in Candelaria East District for the assistance and support during the data collection process in different schools within the district;

School Administrators of Candelaria East District, for granting the researcher permission to administer the questionnaire in their respective schools;

The Teachers – Respondents, for their time and responsiveness in providing the needed data;

Friends, for believing in her and in her capacity to fulfill this study;

To **Medelyn C. Larosa**, her companion for always giving her inspirations and reasons to smile during the hard and tiring times of the study;

Her **Family**, for serving as the source of unending love and reinforcement that has always been the foundation of strength, confidence and hope;

And above all, the **Lord Almighty**, for His continuous unconditional love, guidance and strength in handling the most difficult phase of this commitment and for His countless blessings showered until the completion of this study.

REFERENCES

Abasilim, U. D. (2019). *Leadership Styles and Employees' Commitment: Empirical Evidence From Nigeria*. Retrieved from Sage Journal <https://journals.sagepub.com/doi/full/10.1177/2158244019866287>

Abenes, R. L., & Villanueva, M. T. (2024). Impact of learning resources and school facilities on literacy skills in rural and urban Philippine schools. *International Journal of Educational Research and Development*, 12(3), 88–102. <https://www.researchgate.net/publication/388217913>

Abisuga, A. O. (2020). *A holistic framework with user-centred facilities performance attributes for evaluating higher education buildings*. Retrieved from Emerald Insights : <https://www.emerald.com/f/article-abstract/38/1-2/132/99357/A-holistic-framework-with-user-centred-facilities?redirectedFrom=fulltext>

Adams, J., Bartram, J., Chartier, Y., & Sims, J. (2009). *Water, sanitation and hygiene standards for schools in low-cost settings*. World Health Organization.

Admiraal, W. (2019). *Schools as professional learning communities: what can schools do to support professional development of their teachers?* Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/full/10.1080/19415257.2019.1665573>

Afshari, M., Bakar, K. A., Luan, W. S., Samah, B. A., & Fooi, F. S. (2008). School leadership and information communication technology. *Turkish Online Journal of Educational Technology*, 7(4), 82–91.

Agasisti, T. (2019). *School principals' leadership types and student achievement in the Italian context: Empirical results from a three-step latent class analysis*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/1741143218768577>

Aguinaldo, M., Suanson, L., Estorel, J., & Estiller, R. (2025). *Level of Compliance of School Buildings on DepEd Order No. 6, s. 2021: A Basis for Policy Formulation*. Scipedia.

Ahmad Naveed, H. Y. (2019). *Highly Reversible and Rechargeable Safe Zn Batteries Based on a Triethyl Phosphate Electrolyte*. Retrieved from Wiley Online Library : <https://onlinelibrary.wiley.com/doi/abs/10.1002/anie.201813223>

Ainin, J., Tampus, M. G., & Eliseo, J. M. (2025). *Teacher leadership and collaboration in leading curriculum innovation: A case study on effective practices*. *International Journal of Research in Social Science and Humanities*, 1(7). IJRSS

Aldiab, A. (2019). *Utilization of Learning Management Systems (LMSs) in higher education system: A case review for Saudi Arabia*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/pii/S1876610219312767>

Alblooshi, M. (2020). *The relationship between leadership styles and organisational innovation : A systematic literature review and narrative synthesis*. Retrieved from Emerald Insights : <https://www.emerald.com/insight/content/doi/10.1108/ejim-11-2019-0339/full/html>

Aldridge, J., Fraser, B. J., & Laugksch, R. C. (2017). Student perceptions of learning environments: The impact of classroom design on learning. *Learning Environments Research*, 20(2), 203–222.

Alzoraiki, M., Ahmad, A. R., Ateeq, A., & Milhem, M. (2024). *The role of transformational leadership in enhancing school culture and teaching performance in Yemeni public schools*. *Frontiers in Education*. <https://doi.org/10.3389/feduc.2024.1413607> [Frontiers](#)

Alzoraiki, R., Hidayat, M., Patras, N., Kalkan, S., Magaña-Medina, M., Polatcan, Ö., & Sastrawan, R. (2024). *Strategies for successful transformational leadership by principals*. *Mimbar Ilmu*, 29(3), 401–410. [Undiksha Journal](#)

Ambubuyog, S. L. A., Dela Cruz, R. M., & Villanueva, P. S. (2025). *Assessing the quality of school facilities and student engagement in a public school*. *International Journal of Research Publication and Reviews*, 6(4), 101–110.

Amin, H. (2023). *Perceptions of public school teachers toward leadership styles: A comparative study*. *International Journal of Pedagogical, Humanities and Social Studies*. Projurnal

Anderson, R. E., & Dexter, S. (2005). School technology leadership: An empirical investigation of prevalence and effect. *Educational Administration Quarterly*, 41(1), 49–82. <https://doi.org/10.1177/0013161X04269517>

Angwaomaodoko, E. A. (2025). The role of transformational leadership in fostering innovation and student success. *International Journal of Innovative Research and Development*, 14(6).

Appio, F. P. (2019). *Understanding Smart Cities: Innovation ecosystems, technological advancements, and societal challenges*. Retrieved from Science Direct: <https://www.sciencedirect.com/science/article/abs/pii/S0040162518319954>

Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Addison-Wesley.

Ariate, I. P., & Bacasmot, J. B. (2025). *Technology leadership of school heads and teachers' attitude towards ICT: The mediating effect of technology literacy skills*. *European Journal of Education Studies*. oapub.org

Asia Foundation. (2019). *Breakthrough solution to reduce school congestion* (Philippines case study). The Asia Foundation.

Asian Development Bank. (2020). *Philippines: Education sector assessment, strategy, and road map*. ADB Publications.

Asian Development Bank. (2022). *Learning recovery and reform in the Philippines: Challenges and policy options*. ADB Publications.

Audije, J. A. M., & Panoy, J. F. D. (2025). *Visionary leadership strategies in nurturing teachers' innovative behavioral competencies: The mediating role of leader supportiveness*. *TWIST Journal*. TWIST Journal

Avey, J. B., Avolio, B. J., & Luthans, F. (2011). Experimentally analyzing the impact of leader positivity on follower positivity and performance. *Leadership Quarterly*, 22(2), 282–294. <https://doi.org/10.1016/j.leaqua.2011.02.004>

Avolio, B. J., & Bass, B. M. (1995). *Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership*. *Leadership Quarterly*, 6(2), 199–218.

Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315–338. <https://doi.org/10.1016/j.leaqua.2005.03.001>

Avolio, B. J., & Yammarino, F. J. (2013). *Transformational and charismatic leadership: The road ahead* (2nd ed.). Emerald Group Publishing.

Avolio, B. J., & Yammarino, F. J. (2020). *Transformational and charismatic leadership: The road ahead 10 years of research*. Emerald Publishing.

Aydin, H. (2019). *Education for Syrian Refugees: The New Global Issue Facing Teachers and Principals in Turkey*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/00131946.2018.1561454>

Azeem, M. (2021). *Expanding competitive advantage through organizational culture, knowledge sharing and organizational innovation*. Retrieved from Science Direct: <https://www.sciencedirect.com/science/article/abs/pii/S0160791X2100110X>

Babatunde Akanji, C. M. (2019). *The influence of organisational culture on leadership style in higher education institutions*. Retrieved from Emerald Insights : <https://www.emerald.com/insight/content/doi/10.1108/pr-08-2018-0280/full/html>

Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285.

Balatero, M. F. T., & Bauyot, M. M. (2024). *Enhancing teacher motivation: Leadership strategies in Panabo City public senior high schools*. *Asian Journal of Education and Social Studies*, 50(7), 286–299. <https://doi.org/10.9734/ajess/2024/v50i71463> Asian Journal of Education

Baldera, P. R., Saunil, C. C., Curugan Patiam, A. M., Agpaoa, M. K. A., Villanueva, E. R., Fontamillas, K. I., ... Valenzuela, R. M. (2025). *Digital leadership pioneers: Navigating outstanding school principals' successes in the evolving educational landscape*. *International Journal of Learning, Teaching and Educational Research*. IJLTER

Baloran, E. T. (2020). Transformational leadership and teacher performance in public schools: A Philippine perspective. *Asia Pacific Journal of Education, Arts and Sciences*, 7(1), 15–25.

Baltodano, M. (2023). *Neoliberalism and the demise of public education*. Retrieved from Taylor & Francis: <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003253617-5/neoliberalism-demise-public-education-marta-baltodano>

Bandao, (2023). *Assessing the quality of school facilities and student engagement*. IJRPR. IJRPR

- Bandril, G. R. (2025). *Transformational leadership of middle management and teacher commitment toward enhanced faculty leadership program*. *International Journal of Environmental Sciences*, 11(13s). The ASPD
- Bandura, A. (1977). *Social Learning Theory*. Prentice Hall.
- Bantilan, J. C., Sombilon, E. J. J., Regidor, A. R., Mondoyo, D. P., & Edig, M. M. N. (2024). *Impact of transformational leadership and school environment on organizational commitment of teachers*. *Journal of Social, Humanity, and Education*, 4(2), 99–116. [Goodwood Publishing](#)
- Baptiste, M. (2019). *No Teacher Left Behind: The Impact of Principal Leadership Styles on Teacher Job Satisfaction and Student Success*. Retrieved from ERIC : <https://eric.ed.gov/?id=eJ1212519>
- Barrett, P., Davies, F., Zhang, Y., & Barrett, L. (2019). The impact of school infrastructure on learning: A synthesis of the evidence. *Building and Environment*, 162, 106273. <https://doi.org/10.1016/j.buildenv.2019.106273>
- Barrett, P., Zhang, Y., Moffat, J., & Kobbacy, K. (2019). A holistic, multi-level analysis identifying the impact of classroom design on pupils' learning. *Building and Environment*, 173, 106–114.
- Basco, I. C., & Espiritu, D. L. (2025). *Transformational leadership practices and their impact on teacher performance in public elementary schools in Del Gallego District Division, Camarines Sur*. *Psychology and Education: A Multidisciplinary Journal*, 48(3), 417–443. Scimatic
- Basilaia, G., & Kvavadze, D. (2020). *Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia*. Retrieved from ERIC : <https://eric.ed.gov/?id=EJ1263561>
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9–32. <https://doi.org/10.1080/135943299398410>
- Bass, B. M. (2017). *Leadership and performance beyond expectations*. Free Press.
- Bass, B. M. (2018). *Transformational leadership: Industry, military, and educational impact*. Routledge.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Sage Publications.
- Bass, B. M., & Avolio, B. J. (2019). *Transformational leadership and organizational effectiveness: A resource-based perspective*. Routledge.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership* (2nd ed.). Lawrence Erlbaum Associates.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Psychology Press. Routledge
- Bass, B. M., & Riggio, R. E. (2019). *Transformational leadership* (3rd ed.). Routledge.
- Bennett, J. (2019). *Sources of indoor air pollution at a New Zealand urban primary school; a case study*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/abs/pii/S1309104218302629>
- Bottiani, J. H. (2019). *Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/abs/pii/S0022440519300767>
- Brillantes, M. J. (2018). Instructional leadership practices and teacher performance in Philippine public schools. *Philippine Journal of Educational Administration*, 32(2), 45–62.
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17(6), 595–616. <https://doi.org/10.1016/j.leaqua.2006.10.004>

- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2017). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 117(2), 200–214. <https://doi.org/10.1016/j.obhdp.2011.04.003>
- Brown, M. E., & Treviño, L. K. (2016). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 27(3), 393–414.
- Brubacher, J. S. (1990). *Modern philosophies of education* (6th ed.). McGraw-Hill.
- Bualan, M. B., & Espartero, H. M. (2025). *Worldviews of teachers implementing DepEd's Water Sanitation and Hygiene (WinS) Program* (Transcendental phenomenological study). *Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields*. journals.alloysianpublications.com+1
- Budiongan, J., & Corpuz, G. G. (2024). *School climate and teachers' work engagement in Misamis Oriental: Basis for development plan*. *European Modern Studies Journal*. (Findings on positive school climate influence on teacher engagement, reflective of optimistic leadership effects). lorojournals.com
- Bureau of Internal Audit & CPA Report. (2021). *DepEd school buildings performance standards and specifications compliance audit report*. Republic of the Philippines. cpa.coa.gov.ph
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.
- Bush, T. (2020). Leadership and management development in education: A global perspective. *Educational Management Administration & Leadership*, 48(1), 3–18.
- Bush, T., & Glover, D. (2014). School leadership models: What do we know? *School Leadership & Management*, 34(5), 553–571. <https://doi.org/10.1080/13632434.2014.928681>
- Caballes, M. E. J., et al. (2023). *Status of laboratory resources and science process skills of learners in Eastern Samar (report)*. GNOSI (study). [Semantic Scholar](#)
- Caillier, J. G. (2020). *Testing the Influence of Autocratic Leadership, Democratic Leadership, and Public Service Motivation on Citizen Ratings of An Agency Head's Performance*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/15309576.2020.1730919>
- Cansoy, R. (2019). *The Relationship between School Principals' Leadership Behaviours and Teachers' Job Satisfaction: A Systematic Review*. Retrieved from ERIC : <https://eric.ed.gov/?id=EJ1201517>
- Carmeli, A., Brueller, D., & Dutton, J. E. (2010). Learning behaviours in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science*, 26(1), 81–98. <https://doi.org/10.1002/sres.932>
- Carmen, D. (2024). *Transformational leadership of school heads, team building effectiveness, and stress management competency: A structural equation model on attitude to organizational change of teachers*. *International Journal of Research and Innovation in Social Science*. <https://dx.doi.org/10.47772/IJRISS.2024.8090114> RSIS International
- Carver, C. S., & Scheier, M. F. (2014). *Dispositional optimism*. *Trends in Cognitive Sciences*, 18(6), 293–299. <https://doi.org/10.1016/j.tics.2014.02.003>
- Chan, S. C. (2019). *Participative leadership and job satisfaction: The mediating role of work engagement and the moderating role of fun experienced at work*. Retrieved from Emerald Insights : <https://www.emerald.com/insight/content/doi/10.1108/lodj-06-2018-0215/full/html>
- Chong, A. K. (2019). *Maintenance prioritization – a review on factors and methods*. Retrieved from Emerald Insights : <https://www.emerald.com/jfm/article-abstract/17/1/18/215799/Maintenance-prioritization-a-review-on-factors-and?redirectedFrom=fulltext>
- Christenson, S. L. (2022). *Handbook of Research on Student Engagement*. Retrieved from Springer Nature Link : <https://link.springer.com/book/10.1007/978-3-031-07853-8>

- Cimino, C. (2019). *Review of digital twin applications in manufacturing*. Retrieved from Science Direct <https://www.sciencedirect.com/science/article/abs/pii/S0166361519304385>
- Cohen, J., McCabe, E. M., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, teacher education, and practice. *Teachers College Record*, 111(1), 180–213.
- Cortez, E. G. C. (2024). *Risk Management Skills of School Heads and Disaster Readiness of Students*. *EPRA International Journal of Environmental Economics, Commerce and Educational Management*, 11(6). [eprajournals.com](https://www.eprajournals.com)
- Cranton, P. (2016). *Understanding and promoting transformative learning: A guide to theory and practice* (3rd ed.). Stylus Publishing.
- Crawford, C. M. (2017). Emotional intelligence in school leadership: Impact on teacher engagement and performance. *Educational Management Administration & Leadership*, 45(3), 408–425.
- Creagh, S. (2023). *Workload, work intensification and time poverty for teachers and school leaders: a systematic research synthesis*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/full/10.1080/00131911.2023.2196607>
- Cresencio, M., & Yabut, E. (2023). *Implementation of School Disaster Risk Reduction in Coastal Schools: Basis for a Plan of Action*. *Journal of Education and e-Learning Research*, 10(2), 270–277. ERIC
- Cruz, J. R. (2023). Transformational leadership and disaster resilience in public elementary schools in Quezon Province. *Philippine Journal of Educational Research*, 19(2), 45–62.
- Cruz, J. R., Santos, P. D., & Valdez, M. A. (2023). Assessing thermal comfort and ventilation in Philippine classrooms: Implications for post-pandemic learning environments. *Journal of Environmental and Occupational Health Research*, 14(2), 55–67.
- Da'as, R. (2019). *Conflict, control and culture: implications for implicit followership and leadership theories*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/00131911.2019.1601614>
- Daft, R. L. (2018). *The leadership experience* (7th ed.). Cengage Learning.
- Daguan, J. M., & Tantiado, R. C. (2025). *Leadership support and teachers' practices*. *International Journal of Management Research and Applications*, 8(11). <https://doi.org/10.47191/ijmra/v8-i11-42> IJMRA
- Daniëls, E. (2019). *A review on leadership and leadership development in educational settings*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/abs/pii/S1747938X18300228>
- Day, C., & Sammons, P. (2016). *Successful school leadership*. Education Development Trust.
- Day, C., Gu, Q., & Sammons, P. (2016). *The Impact of Leadership on Student Outcomes: How Successful School Leaders Use Transformational Practices*. Routledge.
- de Brey, C., & Dillow, S. A. (2019). *Digest of Education Statistics 2017, 53rd Edition*. NCES 2018-070. Retrieved from ERIC : <https://eric.ed.gov/?id=ed592104>
- Debrah, J. K. (2021). *Raising Awareness on Solid Waste Management through Formal Education for Sustainability: A Developing Countries Evidence Review*. Retrieved from Mdp : <https://www.mdpi.com/2313-4321/6/1/6>
- de Dear, R., Kim, J., Candido, C., & Deuble, M. (2015). Adaptive thermal comfort in Australian school classrooms. *Building Research & Information*, 43(3), 383–398. <https://doi.org/10.1080/09613218.2015.1007074>
- De Guzman, A. B. (2017). Leadership behaviors and organizational culture in Philippine public schools. *Asia Pacific Education Review*, 18(2), 245–256.

De Los Santos, J. B. (2024). *Transformational leadership and organizational behavior: The mediating role of commitment to change among teachers in Davao City*. *European Journal of Arts, Humanities and Social Sciences*. Ejahss

Dela Cruz, M. G. (2020). Transformational leadership practices and team collaboration among public school heads. *Asia Pacific Journal of Education, Arts and Sciences*, 7(3), 55–63.

Department of Education (DepEd). (2021). *DepEd Order No. 33, s. 2021: School-based management and governance frameworks*. Manila: Department of Education.

Department of Education (DepEd). (2022). *Brigada Eskwela Operations Manual*. Department of Education, Manila.

Department of Education (DepEd). (2022). *Education Facilities Manual (EFM) for Public Schools in the Philippines*. Manila: Department of Education.

Department of Education (DepEd). (2022). *School-Based Management Operations Manual*. Department of Education, Manila.

Department of Education (DepEd). (2025, April 14). *Private sector steps up: 100 remote schools in Cebu receive laptops, connectivity in DepEd-DICT-iACADEMY partnership*. DepEd. Department of Education

Department of Education (DepEd). (2025, March 11). *Connecting the last mile: DepEd, PBBM delivering the promise of digitalization*. DepEd. Department of Education

Department of Education. (2021). *DO 006, s. 2021 — Re-Establishment of Minimum Performance Standards and Specifications (MPSS) for DepEd School Buildings Using Alternative Construction Materials*. Department of Education. https://www.deped.gov.ph/wp-content/uploads/2021/02/DO_s2021_006.pdf

Department of Education. (2021). *WASH in Schools (WinS) program implementation guidelines*. Department of Education. <https://www.deped.gov.ph>

Department of Education. (2022). *Basic Education Development Plan (BEDP) 2030*. <https://www.deped.gov.ph/bedp-2030>

Department of Education. (2022). *Brigada Eskwela implementing guidelines (DO 021, s. 2023)*. <https://www.deped.gov.ph/2023/05/05/do-021-s-2023>

Department of Education. (2023). *Basic education facilities report 2023*. DepEd Central Office.

Department of Education. (2023). *Comprehensive School Safety Framework: Implementation report*. DepEd Central Office.

Department of Education. (2023). *DepEd Computerization Program (DCP) implementation guidelines*. Department of Education. <https://www.deped.gov.ph>

Department of Education. (2023). *DepEd Disaster Risk Reduction and Management (DRRM) in Basic Education Framework*. <https://www.deped.gov.ph>

Department of Education. (2023). *DepEd Internet Connectivity and Digital Rise Program: Implementation guidelines*. <https://www.deped.gov.ph>

Department of Education. (2023). *Digital Rise Program and DepEd Computerization Program (DCP): Implementation guidelines*. Department of Education. <https://www.deped.gov.ph>

Department of Education. (2023). *DO_s2023_024 — Institutionalization of the Maintenance and Operation of Library (DepEd order/memo)*. Department of Education. [Department of Education](https://www.deped.gov.ph)

Department of Public Works and Highways. (2023). *School building safety and structural assessment report*. DPWH Publications.

DepEd Brigada Eskwela implementing guidelines (DO_s2023_021). (2023). https://www.deped.gov.ph/wp-content/uploads/DO_s2023_021.pdf. [Department of Education](https://www.deped.gov.ph)

DepEd Computerization Program (DCP). (n.d.). *DepEd Computerization Program (DCP): From classrooms to cyberspace*. DepEd PH. DepEd PH

DepEd launches digital disaster planning platform and safety guidebook. (2025). *Philippine Information Agency*. Philippine Information Agency

DepEd launches new education resilience tools. (2025). *The Freeman / Philippine Star*. Philstar.com

DepEd Order No. 64, s. 2017. *Establishing the Minimum Performance Standards and Specifications for DepEd School Buildings*. Department of Education, Philippines. Department of Education

DepEd. (2021). *DepEd Order No. 24, s. 2021: School-based management and transformational stewardship framework*. Manila: Department of Education.

Desiree, & Darling-Hammond, L. (2019). *The Trouble with Teacher Turnover: How Teacher Attrition Affects Students and Schools*. Retrieved from ERIC : <https://eric.ed.gov/?id=EJ1213629>

Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. D.C. Heath & Company.

Dewi, W. C. (2026). Transformational leadership implementation in resource-constrained primary schools. *Journal of Interdisciplinary Research in Education*.

Dizon, E. (2018). Transformational leadership practices of school heads and school improvement initiatives. *International Journal of Education and Research*, 6(7), 65–78.

Dizon, R. M. (2019). The role of emotional intelligence and respect-based leadership among Filipino school administrators. *Philippine Journal of Educational Leadership*, 12(1), 22–35.

Domingo, Z. D. (2020). Transformational leadership and school effectiveness in the Philippine public school system. *Asia Pacific Journal of Education, Arts and Sciences*, 7(2), 34–42.

DOST-PCIEERD / Info Institute. (2024, Nov 7). DOST Info Institute makes libraries alive through scale-up program. <https://www.dost.gov.ph/knowledge-resources/news/84-2024-news/3812-dost-info-institute-makes-libraries-alive-through-scaleup-program.html>. DOST

Dr. Yong Wang, X. L. (2019). *The Role of Dimethylammonium Iodide in CsPbI₃ Perovskite Fabrication: Additive or Dopant?* Retrieved from Wiley Online Library : <https://onlinelibrary.wiley.com/doi/abs/10.1002/ange.201910800>

Dreibelbis, R., Freeman, M. C., Greene, L. E., Saboori, S., & Rheingans, R. (2014). The impact of school water, sanitation, and hygiene interventions on health and educational outcomes: A review of the evidence. *International Journal of Environmental Research and Public Health*, 11(3), 2760–2778. <https://doi.org/10.3390/ijerph110302760>

Dwi, Y., & Hanif, M. (2019). *Using Learning Media to Increase Learning Motivation in Elementary School*. Retrieved from ERIC : <https://eric.ed.gov/?id=ej1244451>

Earthman, G. I. (2004). *Prioritization of 31 criteria for school building adequacy*. American Civil Liberties Union Foundation of Maryland.

Earthman, G. I. (2019). *School facility conditions and student academic achievement*. National Clearinghouse for Educational Facilities.

EdCom II. (2025). *Fixing the foundations: A matter of national survival (Year 2 report)*. Second Congressional Commission on Education. [EDCOM 2](#)

Edwards-Groves, C. (2019). *Driving change from 'the middle': middle leading for site based educational development*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/13632434.2018.1525700>

El Achi, S., Al Maalouf, N. J., Barakat, H., & Mawad, J. L. (2025). *The impact of transformational leadership and work environment on teachers' performance in crisis-affected educational settings*. *Administrative Sciences*, 15(7), 256. <https://doi.org/10.3390/admsci15070256> [MDPI](#)

Elkhwesky, Z. (2022). *A systematic and critical review of leadership styles in contemporary hospitality: a roadmap and a call for future research*. Retrieved from Emerald Insights : <https://www.emerald.com/insight/content/doi/10.1108/ijchm-09-2021-1128/full/html>

Encallado, H. P., Bajarias, N. D., De Guzman, R. Q., & Peligro, V. C. (2025). *The effectiveness of transformational leadership: A quantitative study of teachers' perceptions*. *Journal of Education, Learning, and Management*, 2(2), 296–303. [Stecab Publishing](#)

Ermita, L., & Baysa, M. L. (2025). *Transformational leadership practices of school heads: Teachers' motivation and school performance*. *Jurnal Inovasi Pendidikan*. <https://doi.org/10.60132/jip.v3i3.499> Edukhasi

Esogon, S. G. (2024). *Practice of transformational leadership of school heads and work performance of teachers in public elementary schools*. *Journal of Educational Leadership and Practice*. [Philippine EJournals](#)

Esogon, S. G. T., & Gumban, J. L. (2024). *Transformational leadership of school heads in public elementary schools in Bacolod City, Philippines*. *International Journal of Research and Innovation in Social Science*. RSIS International

Esogon, S. G., & Cruz, M. T. (2024). *Practice of transformational leadership of school heads and work performance of teachers in public elementary schools*. *Journal of Educational Leadership and Practice*, 12(3), 45–59.

Esogon, S. G., et al. (2024). *School leadership and facility improvement studies (Philippine contexts)*. *Journal of Educational Leadership and Practice*. [Ijams BBP](#)

Esrey, S., Potash, J., Roberts, L., & Shiff, C. (2017). Effects of improved water supply and sanitation on health. *Bulletin of the World Health Organization*, 95(6), 422–430

Ethical leadership and administrative competence of school administrators. (2025). *SJAHSS*. Sprin Publisher

Evans, G. W., & Maxwell, L. (2017). School building condition and student achievement. *Environment and Behavior*, 49(8), 876–900.

Eyal, O., & Roth, G. (2011). Principals' leadership and teachers' motivation: Self-determination theory analysis. *Journal of Educational Administration*, 49(3), 256–275. <https://doi.org/10.1108/09578231111129055>

Fababier, D. J. G., & Apostol, R. L. (2024). *Transformational leadership of school heads and individual work performance of teachers: The mediating effect of organizational commitment*. *European Journal of Education Studies*, 11(5). OAPub

Freeman, M., Stocks, M., Cumming, O., Jeandron, A., Higgins, J., Wolf, J., & Curtis, V. (2018). Hygiene and health in schools: Systematic review of water, sanitation, and hygiene interventions. *International Journal of Environmental Research and Public Health*, 15(5), 937.

Fries, A. (2021). *Leadership Styles and Leadership Behaviors in Family Firms: A Systematic Literature Review*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/pii/S1877858520301017>

Fullan, M. (2001). *Leading in a Culture of Change*. Jossey-Bass.

Fullan, M. (2014). *The principal: Three keys to maximizing impact*. Jossey-Bass.

Galila, R. A., Valdez, W. B., & Escarlos, G. S. (2025). *Transformational leadership theory and its application to educational governance and administration in the Philippines: A systematic review*. *International Journal of Research and Innovation in Social Science*, 9(10), 3499–3504. RSIS International

Gallardo, M. F. M., Llanos, N. L., & Perez, G. R. (2024). *Leadership styles of the principals through the lens of teachers and staff: A phenomenological exploration*. *Dinkum Journal of Social Innovations*, 3(08), 470–481.

Gardner, J. W., Lowe, K. B., Moss, T. W., Mahoney, K. T., & Coglisier, C. C. (2020). Scholarly leadership of the study of leadership: Contributions and future directions. *The Leadership Quarterly*, 31(1), 101379.

- Gaytos, C. E., & Daria, I. (2025). Transformational leadership styles of school heads and teachers' continuing professional development engagement. *International Journal of Advanced Multidisciplinary Studies*.
- George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations*, 53(8), 1027–1055. <https://doi.org/10.1177/0018726700538001>
- Goleman, D. (2000). *Leadership that gets results*. Harvard Business Review.
- Goleman, D. (2017). *Leadership: The Power of Emotional Intelligence*. More Than Sound.
- Goleman, D. (2020). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Goleman, D., Boyatzis, R., & McKee, A. (2018). *Primal leadership: Unleashing the power of emotional intelligence* (2nd ed.). Harvard Business Review Press.
- Gonzales, A. L. (2019). *Technology Problems and Student Achievement Gaps: A Validation and Extension of the Technology Maintenance Construct*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/0093650218796366>
- González-Falcón, I. (2019). *The importance of principal leadership and context for school success: insights from '(in)visible school'*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/13632434.2019.1612355>
- Grobler, B., & Conley, L. (2019). Leadership in education: Ethical transformational practices for effective management. *South African Journal of Education*, 39(2), 1–10. <https://doi.org/10.15700/saje.v39n2a1618>
- Hallinger, P. (2020). 'Are principals instructional leaders yet?' A science map of the knowledge base on instructional leadership, 1940–2018. Retrieved from Springer Nature Link: <https://link.springer.com/article/10.1007/s11192-020-03360-5>
- Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration*, 49(2), 125–142. <https://doi.org/10.1108/09578231111116699>
- Hallinger, P. (2018). Bringing context out of the shadows of leadership: An invited commentary. *Educational Management Administration & Leadership*, 46(1), 5–24. <https://doi.org/10.1177/1741143217728088>
- Hallinger, P. (2021). *Leadership for learning: Lessons from 40 years of empirical research*. Springer.
- Hallinger, P. (2022). Leadership for learning: The evolving role of school leaders in teacher development. *Educational Management Administration & Leadership*, 50(3), 345–362. <https://doi.org/10.1177/17411432211063245>
- Han, S. J. (2020). *Growth Mindset for Human Resource Development: A Scoping Review of the Literature with Recommended Interventions*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/1534484320939739>
- Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. Teachers College Press.
- Hargreaves, A., & O'Connor, M. T. (2020). *Professional capital and professional practice: Respect and trust in schools*. Teachers College Press.
- Harris, A. (2013). Distributed leadership: Friend or foe? *Educational Management Administration & Leadership*, 41(5), 545–554. <https://doi.org/10.1177/1741143213497635>
- Harris, A. (2020). *COVID-19 – school leadership in crisis?* Retrieved from Emerald Insights: <https://www.emerald.com/insight/content/doi/10.1108/jpcc-06-20200045/full/html>
- Harris, A., & Jones, M. (2018). Why context matters: A comparative perspective on education reform and leadership. *Educational Research for Policy and Practice*, 17(3), 195–207.
- Harris, A., Day, C., Hopkins, D., Hadfield, M., Hargreaves, A., & Chapman, C. (2003). *Effective leadership for school improvement*. Routledge. Routledge

Harris, A., Jones, M., & Cheah, K. S. (2019). Leading learning and change in rural schools: Transformational leadership and ICT innovation. *Educational Management Administration & Leadership*, 47(5), 689–706. <https://doi.org/10.1177/1741143217751074>

Hartley, D. (2023). *Education policy, distributed leadership and socio-cultural theory*. Retrieved from Taylor & Francis : <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003403708-17/education-policy-distributed-leadership-socio-cultural-theory-david-hartley>

Haslam, S. A., Reicher, S. D., & Platow, M. J. (2020). *The New Psychology of Leadership: Identity, Influence, and Power* (2nd ed.). Routledge.

Heifetz, R. A. (1994). *Leadership without easy answers*. Harvard University Press.

Herbane, B. (2019). *Rethinking organizational resilience and strategic renewal in SMEs*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/08985626.2018.1541594>

Himeur, Y. (2022). *AI-big data analytics for building automation and management systems: a survey, actual challenges and future perspectives*. Retrieved from Springer Nature Link : <https://link.springer.com/article/10.1007/s10462-022-10286-2>

Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2018). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. *Journal of Management*, 44(2), 501–529.

Hofstein, A., & Lunetta, V. N. (2004). The laboratory in science education: Foundations for the twenty-first century. *Science Education*, 88(1), 28–54. <https://doi.org/10.1002/sce.10106>

Hopkins, D., & Harris, A. (2000/2001). *Building the capacity for school improvement: Internal conditions and structures for continuous improvement* (conceptual framework). In *Effective leadership for school improvement* (various chapters). Routledge. ResearchGate

Horne-Martin, S. (2019). *The classroom environment and its effects on teaching and learning*. *Educational Psychology Review*, 31(2), 345–362. <https://doi.org/10.1007/s10648-019-09467-2>

Hu, D. (2021). *Factors That Influence Participation in Physical Activity in School-Aged Children and Adolescents: A Systematic Review from the Social Ecological Model Perspective*. Retrieved from Mdpi : <https://www.mdpi.com/1660-4601/18/6/3147>

Huertas-Valdivia, I. (2019). *Effects of different leadership styles on hospitality workers*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/abs/pii/S0261517718302620>

Humphrey, R. H. (2013). The benefits of emotional intelligence and empathy to entrepreneurship. *Entrepreneurship Research Journal*, 3(3), 287–294.

IFLA (International Federation of Library Associations and Institutions). (2015). *IFLA school library guidelines*. IFLA Publications.

Improving toilet usability and cleanliness in public schools in the Philippines using a packaged operation and maintenance intervention. (2022). *International Journal of Environmental Research and Public Health*, 19(16), 10059. MDPI

Influence of transformational leadership on teachers' motivation in public elementary schools in Davao Oriental. (2024). *Nexus International Journal of Science and Education*, 1(2). <https://doi.org/10.5281/zenodo.12595152> Nijse

International Federation of Library Associations and Institutions. (2015). *IFLA school library guidelines*. IFLA Publications.

Irene S. Caharian & Emmie M. Cabanlit. (2024). *A systematic review on the influence of transformational leadership and teacher commitment to educational institutions*. *International Journal of Research and Innovation in Social Science*, 8(9). RSIS International

Jasper, C., Le, T., & Bartram, J. (2012). Water and sanitation in schools: A systematic review of the health and educational outcomes. *International Journal of Environmental Research and Public Health*, 9(8), 2772–2787. <https://doi.org/10.3390/ijerph9082772>

Johnson, J., & Klein, B. (2019). *Why Rural Matters 2018-2019: The Time Is Now. A Report of the Rural School and Community Trust*. Retrieved from ERIC : Why Rural Matters 2018-2019: The Time Is Now. A Report of the Rural School and Community Trust

Jones, M. (2020). *COVID 19 – school leadership in disruptive times*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/full/10.1080/13632434.2020.1811479>

Julia Hillmann, E. G. (2020). *Organizational Resilience: A Valuable Construct for Management Research?* Retrieved from Wiley Online Library : <https://onlinelibrary.wiley.com/doi/full/10.1111/ijmr.12239>

Kaden, U. (2020). *COVID-19 School Closure-Related Changes to the Professional Life of a K–12 Teacher*. Retrieved from Mdpi : <https://www.mdpi.com/2227-7102/10/6/165>

Kagawa, F., & Selby, D. (2019). *Education and disaster risk reduction: Building resilience through transformative learning*. Routledge.

Kalkan, Ü. (2020). *The Relationship Between School Administrators' Leadership Styles, School Culture, and Organizational Image*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/2158244020902081>

Karacabey, M. F. (2020). *Principal leadership and teacher professional learning in Turkish schools: examining the mediating effects of collective teacher efficacy and teacher trust*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/03055698.2020.1749835>

Kareem, J., Patrick, H. A., Prabakaran, N., Tania, V., & Mukherjee, U. (2023). Transformational educational leaders inspire school educators' commitment. *Frontiers in Education*, 8, 1171513.

Kebede, B. F. (2023). *The Effect of Leadership Style on Midwives' Performance, Southwest, Ethiopia*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/full/10.2147/JHL.S397907>

Kee, A., & Razon, M. (2024). *School infrastructure in the Philippines: Where are we now and where should we be heading?* Philippine Institute for Development Studies Discussion Paper Series.

Kelly, L. M. (2020). *Three principles of pragmatism for research on organizational processes*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/2059799120937242>

Khalil, A., & Chaudhry, S. (2021). Transformational leadership of head teachers and academic optimism. *International Journal of Educational Research and Innovation*, 16, 24–38. <https://files.eric.ed.gov/fulltext/EJ1338295.pdf>

Khan, M. A. (2020). *The Interplay of Leadership Styles, Innovative Work Behavior, Organizational Culture, and Organizational Citizenship Behavior*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/2158244019898264>

Kirkwood, A., & Price, L. (2019). Technology-enhanced learning and teaching in higher education: What is 'enhanced' and how do we know? *British Journal of Educational Technology*, 50(2), 421–437.

Kober, N., & Rentner, D. S. (2020). *History and Evolution of Public Education in the US*. Retrieved from ERIC : <https://eric.ed.gov/?id=ED606970>

Kouzes, J. M., & Posner, B. Z. (2019). *The leadership challenge: How to make extraordinary things happen in organizations* (7th ed.). Wiley.

Kozma, R. (2005). *National policies that connect ICT-based education reform to economic and social development*. UNESCO.

- Krashen, S. D. (2019). *The power of reading: Insights from the research* (2nd ed.). Libraries Unlimited.
- Latham, A. (2019). *Social infrastructure and the public life of cities: Studying urban sociality and public spaces*. Retrieved from Wiley Online Library : <https://compass.onlinelibrary.wiley.com/doi/full/10.1111/gec3.12444>
- Le, J., Hamid, A. H. A., & Mansor, A. N. (2025). Transformational leadership in schools: A bibliometric and content analysis (2000–2024). *International Journal of Educational Leadership and Management*, 13(2), 92–112.
- Leithwood, K. (n.d.). *Leadership influences on student learning and school improvement*. Wikipedia. Wikipedia
- Leithwood, K. (2019). *Seven strong claims about successful school leadership revisited*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/full/10.1080/13632434.2019.1596077>
- Leithwood, K., & Harris, A. (2019). Collective leadership and teacher professional development in school improvement. *School Leadership & Management*, 39(2), 123–140. <https://doi.org/10.1080/13632434.2018.1534778>
- Leithwood, K., & Jantzi, D. (2005). Transformational leadership. In B. Davies (Ed.), *The essentials of school leadership* (pp. 31–43). SAGE Publications.
- Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17(2), 201–227.
- Leithwood, K., & Jantzi, D. (2018). Transformational school leadership effects on school culture and student engagement. *Educational Administration Quarterly*, 54(3), 365–389. <https://doi.org/10.1177/0013161X18769002>
- Leithwood, K., & Jantzi, D. (2020). *Applicable research linking transformational leadership and school improvement* (contextual reference). RSIS International
- Leithwood, K., & Louis, K. S. (2017). Linking leadership to student learning: The role of collective leadership and professional communities. *Journal of Educational Administration*, 55(2), 145–166. <https://doi.org/10.1108/JEA-07-2016-0074>
- Leithwood, K., & Louis, K. S. (2017). Linking leadership to student learning: The role of trust and respect in school improvement. *Journal of Educational Administration*, 55(3), 240–258. <https://doi.org/10.1108/JEA-10-2016-0112>
- Leithwood, K., Harris, A., & Hopkins, D. (2019). Seven strong claims about successful school leadership revisited. *School Leadership and Management*, 40(1), 5–22. <https://doi.org/10.1080/13632434.2019.1596077>
- Leithwood, K., & Mascal, B. (2019). Collective leadership effects on teacher problem-solving and school improvement. *Journal of Educational Administration*, 57(4), 456–472. <https://doi.org/10.1108/JEA-06-2018-0105>
- Leithwood, K., & Seashore Louis, K. (2020). *Linking leadership to student learning: The role of collective leadership and professional communities*. Jossey-Bass.
- Leithwood, K., & Seashore Louis, K. (2021). *Educational leadership and school improvement: Evidence-based perspectives*. Springer.
- Leithwood, K., & Sun, J. (2018). The nature and effects of transformational school leadership: A meta-analytic review. *Educational Administration Quarterly*, 54(3), 1–36.
- Leithwood, K., Sun, J., & Schumacker, R. (2020). How school leadership influences student learning: A test of “The Four Paths Model.” *Educational Administration Quarterly*, 56(4), 570–599. <https://doi.org/10.1177/0013161X19878772>
- Leithwood, K., Harris, A., & Hopkins, D. (2017). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 37(1–2), 5–22. <https://doi.org/10.1080/13632434.2016.1221768>
- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 40(1), 5–22. <https://doi.org/10.1080/13632434.2019.1596077>

Leithwood, K., Harris, A., & Hopkins, D. (2016). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 36(1), 5–22.

Liebowitz, D. D. (2019). *The Effect of Principal Behaviors on Student, Teacher, and School Outcomes: A Systematic Review and Meta-Analysis of the Empirical Literature*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.3102/0034654319866133>

Liwanag, A. R., & Ching, D. A. (2025). *Working climate mediating role to empowering leadership and teacher's professionalism in public elementary school*. *TWIST Journal*. TWIST Journal

Llego, M. A. (2022). Digital leadership of Filipino school heads during the pandemic: Challenges and strategies. *Philippine Educational Leadership Review*, 12(1), 55–70.

Locke, E. A., & Latham, G. P. (1990). *A Theory of Goal Setting and Task Performance*. Prentice Hall.

Logroño, C. M. G., & Tagadiad, C. L. (2023). *Instructional leadership and ethical climate as determinants of school connectedness*. *International Journal of Research and Innovation in Social Science*. RSIS International

Lokuge, S. (2019). *Organizational readiness for digital innovation: Development and empirical calibration of a construct*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/abs/pii/S0378720616303111>

Lonsdale, M. (2003). *Impact of school facilities on student achievement: A review of the research*. Australian Council for Educational Research.

Lopez, V. C. (2024). *School-Based Resilience Leadership Framework for Principals in Times of Disaster*. Qualitative Study. ResearchGate

Lorusso, P. (2022). *Fire Emergency Evacuation from a School Building Using an Evolutionary Virtual Reality Platform*. Retrieved from Mdpi : <https://www.mdpi.com/2075-5309/12/2/223>

Lumawag, E. L., & Bautista, M. P. (2024). *School heads' emotional intelligence and transformational leadership*. RISE Journals. <https://doi.org/10.5281/zenodo.11473179> Zenodo

Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16(1), 57–72. <https://doi.org/10.5465/ame.2002.6640181>

Madani, R. A. (2019). *Analysis of Educational Quality, a Goal of Education for All Policy*. Retrieved from ERIC : <https://eric.ed.gov/?id=EJ1203706>

Maligsay, M. B., & Quines, L. A. (2024). *The mediating effect of affective commitment on the relationship between transformational leadership of school heads and organizational change among public elementary schools*. *European Journal of Education Studies*. OAPub

Manasan, R. G. (2019). *Financing public basic education in the Philippines: Progress and challenges*. Philippine Institute for Development Studies (PIDS) Discussion Paper Series No. 2019-06. <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1906.pdf>

Manlapaz, I. P. (2023). *Exploring the impact of leadership styles on the motivation of millennial teachers*. *American Journal of Interdisciplinary Research and Innovation (AJIRI)*. <https://doi.org/10.54536/ajiri.v1i2.497> E-Palli Journals

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.

McCarley, T. A., Peters, M. L., & Decman, J. M. (2016). Transformational leadership related to school climate: A multi-level analysis. *Educational Management Administration & Leadership*, 44(2), 322–342.

McCarthy, J. D., & Zald, M. N. (1977). *Resource mobilization and social movements: A partial theory*. *American Journal of Sociology*, 82, 1212–1241. Chicago Journals

- McInerney, D. M., Korpershoek, H., Wang, H., & Morin, A. J. S. (2018). Teachers' motivational beliefs, engagement, and student outcomes: The role of positive and supportive school environments. *Educational Psychology Review*, 30(4), 1205–1230.
- McIsaac, J.-L. D. (2019). *Factors Influencing the Implementation of Nutrition Policies in Schools: A Scoping Review*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/1090198118796891>
- McMichael, C. (2019). *Water, Sanitation and Hygiene (WASH) in Schools in Low-Income Countries: A Review of Evidence of Impact*. Retrieved from Mdpi : <https://www.mdpi.com/1660-4601/16/3/359>
- McLaren, P. (2023). *Critical Pedagogy: A Look at the Major Concepts*. Retrieved from Taylor & Francis : <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003286080-6/critical-pedagogy-look-major-concepts-peter-mclaren>
- Mendell, M. J., & Heath, G. A. (2005). Do indoor pollutants and thermal conditions in schools influence student performance? A critical review of the literature. *Indoor Air*, 15(1), 27–52. <https://doi.org/10.1111/j.1600-0668.2004.00320.x>
- Mendoza, L. P. (2022). Transformational leadership and disaster preparedness management in Philippine public schools. *International Journal of Educational Leadership and Management*, 10(2), 47–65.
- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, 1997(74), 5–12. <https://doi.org/10.1002/ace.7401>
- Mintz, B. (2021). *Neoliberalism and the Crisis in Higher Education: The Cost of Ideology*. Retrieved from Wiley Online Library: <https://onlinelibrary.wiley.com/doi/abs/10.1111/ajes.12370>
- Miotto, G. (2020). *Reputation and legitimacy: Key factors for Higher Education Institutions' sustained competitive advantage*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/abs/pii/S0148296319307519>
- Miranda, B. H. (2024). *Assessment of the School Improvement Plan in relation to school performance: Basis for strategic planning*. *International Journal for Multidisciplinary Research (IJFMR)*, 6(3). IJFMR
- Morales, J. S., & Marquez, M. F. (2025). *Strengthening teachers' innovativeness through transformational leadership educational reform framework*. *EPRA International Journal of Multidisciplinary Research (IJMR)*. EPRA Journals
- Msila, V. (2014). *Transformational Leadership in Education: A South African Perspective*. Pretoria: Van Schaik Publishers.
- Mudassar Ali, L. Z. (2020). *Impact of humble leadership on project success: the mediating role of psychological empowerment and innovative work behavior*. Retrieved from Emerald Insights : <https://www.emerald.com/insight/content/doi/10.1108/Iodj-05-2019-0230/full/html>
- Mukuna, D. S., Piliyesi, E., & Mwal'wa, S. (2025). Influence of principal's transformational leadership practice of idealized influence on academic performance of public secondary schools students. *Reviewed Journal International of Education Practice*.
- Mulford, B., & Silins, H. (2003). Leadership for organizational learning and improved student outcomes—What do we know? *Cambridge Journal of Education*, 33(2), 175–195. <https://doi.org/10.1080/0305764032000081088>
- Muthee, A. (2020). Leadership styles and sustainability of WASH facilities in primary schools in rural Kenya. *African Educational Research Journal*, 8(4), 522–530.
- National Disaster Risk Reduction and Management Council. (2023). *National Disaster Risk Reduction and Management Framework 2023–2030*. NDRRMC Publications.
- National Library of the Philippines. (2023). *Status report of Philippine public libraries and librarianship*. National Library of the Philippines. web.nlp.gov.ph

- Nazayanti, N., Wahyudi, W., & Chiar, M. (2025). *The influence of transformational leadership and school environment on academic achievement of PAUD teachers at West Pontianak District*. *Journal of Education, Teaching and Learning*, 971. [E Journal STKIP Singkawang](#)
- Netolicky, D. M. (2020). *School leadership during a pandemic: navigating tensions*. Retrieved from Emerald Insights : <https://www.emerald.com/insight/content/doi/10.1108/jpcc-05-2020-0017/full/html>
- Ng, P. T. (2019). Educational reform and school leadership in Asia: Challenges and opportunities. *Educational Management Administration & Leadership*, 47(4), 601–619.
- Ng, W. (2021). Transformational leadership and technology integration in schools. *Journal of Educational Technology Research*, 29(3), 115–131.
- Nguni, S., Slegers, P., & Denessen, E. (2016). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in Tanzanian primary schools. *School Effectiveness and School Improvement*, 17(2), 145–177. <https://doi.org/10.1080/09243450600565746>
- Nguyen, T. H., & Le, P. Q. (2025). The impact of transformational leadership on educational environments: A systematic review. *Journal of Educational Leadership and Policy Studies*, 18(1), 55–73. <https://www.researchgate.net/publication/390015975>
- Nguyen, T. H., Bui, H. T., & Nguyen, P. T. (2021). Transformational leadership and teacher performance: The mediating role of school climate. *International Journal of Leadership in Education*, 24(5), 567–589. <https://doi.org/10.1080/13603124.2019.1580774>
- Nguyen, T., & Nguyen, P. (2021). Intellectual stimulation in educational leadership: Impacts on teacher creativity and school improvement. *International Journal of Educational Management*, 35(6), 1201–1215.
- Northouse, P. G. (2022). *Leadership: Theory and Practice* (9th ed.). SAGE Publications.
- Ntalakos, A. (2023). *Leadership Styles and Group Dynamics in the Tourism Industry*. Retrieved from Springer Nature Link: https://link.springer.com/chapter/10.1007/978-3-031-29426-6_8
- Nucifora, A., & Tan, S. H. (2021). Leadership and disaster resilience in Southeast Asian schools: The transformational advantage. *Asian Journal of Educational Administration*, 15(1), 21–36.
- Nurizayani, N., Niswanto, N., & Usman, N. (2024). *Empowering education: Transformational leadership creates inspiring work climates to boost teacher performance*. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 8(4). <https://doi.org/10.33650/al-tanzim.v8i4.9646> [E-Journal UNUJA](#)
- Ogunniyi, M. B. (2020). The role of instructional materials in effective teaching and learning of basic science. *International Journal of Education and Social Science*, 7(5), 65–74.
- Okojie, P., Olinzock, A., & Okojie-Boulder, T. (2016). The challenges of ICT in education in developing countries. *Journal of Educational Technology Systems*, 45(3), 305–330.
- Optimistic leadership mediating role study*. (2025). *International Journal of Progressive Research in Engineering Management and Science (IJPREAMS)*. (Study on optimistic leadership and its mediation between school environment and teachers' creativity in Davao del Sur). IJPREAMS
- Oracion, M. (2014). Transformational leadership and change in Philippine public schools. *Asia Pacific Education Review*, 15(4), 523–534.
- Organization for Economic Cooperation and Development. (2021). *OECD learning compass 2030: Transformative competencies for inclusive learning environments*. OECD Publishing.
- Oyugi, M., & Gogo, J. O. (2019). *Influence of Principals' Leadership Styles on Students' Academic Performance in Secondary Schools in Awendo Sub-County, Kenya*. Retrieved from ERIC : <https://eric.ed.gov/?id=EJ1208338>

Owoeye, J. S., & Yara, P. O. (2011). School facilities and academic achievement of secondary school agricultural science in Ekiti State, Nigeria. *Asian Social Science*, 7(7), 64–74. <https://doi.org/10.5539/ass.v7n7p64>

Ozmon, H. A., & Craver, S. M. (2011). *Philosophical foundations of education* (9th ed.). Pearson Education.

Padolina-Alcantara, F. P. (2023). *Digital era readiness and leadership and management competencies of school heads in the Schools Division of Marinduque*. *IJRASET Journal for Research in Applied Science and Engineering Technology*. IJRASET

Pasaribu, I. M. (2020). *Proceedings of the 5th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2020)*. Retrieved from Atlantis Press : <https://www.atlantis-press.com/proceedings/aisteel-20/125946502>

Pasion, M. R., & Tindowen, D. J. (2020). Transformational leadership practices of school heads and teachers' performance in Northern Luzon. *International Journal of Educational Research and Innovation*, 14, 123–139.

Penonia, M. P., & Quines, L. A. (202?). *The mediating effect of teachers' trust on the relationship between transformational leadership of school heads and teachers' self-efficacy of public school teachers*. *American Journal of Multidisciplinary Research and Innovation*. E-Palli

Petal, M. (2019). *Comprehensive school safety: A global framework for school disaster risk reduction and resilience*. Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRRES).

Peter Adatara, P. A. (2021). *Challenges experienced by midwives working in rural communities in the Upper East Region of Ghana: a qualitative study*. Retrieved from Springer Nature Link : <https://link.springer.com/article/10.1186/s12884-021-03762-0>

Philippine Department of Education. (2016). *DepEd Order No. 10, s. 2016: Policy and Guidelines for the Comprehensive Water, Sanitation, and Hygiene in Schools (WinS) Program*. DepEd, Philippines. Scribd

Philippine Department of Education. (2017). *DepEd Order No. 64, s. 2017: Establishing the Minimum Performance Standards and Specifications for DepEd School Buildings*. DepEd, Philippines. (Policy reference)

Philippine Department of Education. (2021). *DepEd WinS report: More schools make great progress in water, sanitation, and hygiene conditions*. DepEd. Department of Education

Philippine Institute for Development Studies (PIDS). (2024). *Education infrastructure policy brief: Addressing classroom shortages in public schools*. PIDS.

Philippine Institute for Development Studies. (2025). *Infrastructure backlog in basic education: Policy issues and options*. PIDS Discussion Paper Series 2025-03.

Philippine Institute for Volcanology and Seismology. (2024). *Hazard mapping and risk assessment of school facilities in the Philippines*. DOST–PHIVOLCS Publications.

Philippine Study on School Heads' Performance in School Improvement Planning. (2025). *Journal of Interdisciplinary Perspectives*. jippublication.com

Pietarinen, J., Pyhältö, K., & Soini, T. (2017). Shared leadership and teacher agency in school improvement. *International Journal of Leadership in Education*, 20(3), 1–17.

Pishgooie, A. H. (2019). *Correlation between nursing managers' leadership styles and nurses' job stress and anticipated turnover*. Retrieved from Wiley Online Library : <https://onlinelibrary.wiley.com/doi/abs/10.1111/jonm.12707>

Piowar-Sulej, K. (2023). *Leadership styles and sustainable performance: A systematic literature review*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/pii/S0959652622041725>

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1(2), 107–142.

Prasetia, I. (2024). Transformational leadership: The power to achieve school effectiveness. *International Journal of Scientific Research and Management*, 12(4), 3356–3364.

Quennie S. Soriano & Agripina F. Banayo. (2024). *Transformational educational leaders inspire school educators' commitment*. *International Journal of Innovative Science and Research Technology*. OUCI

Quilario, J. P. A., Aligway, J. P., & Prusas, J. E. (2024). *The mediating role of motivation on the relationship between transformational leadership and work performance of teachers from Sta. Josefa District*. *International Journal of Research and Innovation in Social Science*. <https://dx.doi.org/10.47772/IJRISS.2024.8080108> RSIS International

Ramos, R. (2025). *Transformational leadership in education: Impacts and implications*. *Journal of Innovative Practice in Education*, 8(1), 22–34.

Ramos, R. (2025). *Transformational leadership in education: Impacts and practices toward enhancing school performance*. *Journal of Interdisciplinary Perspectives*, 3(9), 527–536. jippublication.com

Research on laboratory-based science instruction in Bataan (2025). *Insights from teachers' experiences and implications for contextualized interventions*. ResearchGate. [ResearchGate](https://www.researchgate.net/publication/368111111)

Reuters. (2024, April 29). *Philippine students suffer in wilting heat, thwarting education efforts*. Reuters News. <https://www.reuters.com/world/asia-pacific>

Reyes, A. T., & Gabriel, M. J. (2019). Leadership styles and school effectiveness in selected public elementary schools. *Philippine Social Science Journal*, 2(1), 44–56.

Robinson, V. M. J. (2016). *Student-centered leadership* (2nd ed.). Jossey-Bass.

Rocete, A. Z. (2025). *Transformational leadership of school heads and adaptive performance of elementary teachers in Cluster 1, Tagum City Division*. *International Journal of Progressive Research in Engineering Management and Science*, 5(07), 1891–1901. IJPREMS

Rosati, F. (2019). *Business contribution to the Sustainable Development Agenda: Organizational factors related to early adoption of SDG reporting*. Retrieved from Wiley Online Library : <https://onlinelibrary.wiley.com/doi/abs/10.1002/CSR.1705>

Sadrizadeh, S. (2022). *Indoor air quality and health in schools: A critical review for developing the roadmap for the future school environment*. Retrieved from Science Direct: <https://www.sciencedirect.com/science/article/pii/S2352710222009202>

Sagnak, M. (2010). The relationship between transformational school leadership and ethical climate. *Educational Sciences: Theory & Practice*, 10(2), 1135–1152.

Salas, E., Reyes, D. L., & McDaniel, S. H. (2018). The science of teamwork: Progress, reflections, and the road ahead. *American Psychologist*, 73(4), 593–600.

Salita, et al. (2021). *School Disaster Preparedness, Response and Recovery*. SciMatic. scimatic.org

Sanchez, J. E. (2020). *Relationships among teachers' perceptions of principal leadership and teachers' perceptions of school climate in the high school setting*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/13603124.2019.1708471>

Santiago, R. A., & Roxas, R. M. (2020). Instructional leadership practices of school heads and teacher performance in public elementary schools. *International Journal of Educational Management*, 34(9), 1407–1420.

Santos, J. M. (2021). *Technological Pedagogical content knowledge (TPACK) in action: Application of learning in the classroom by pre-service teachers (PST)*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/pii/S2590291121000061>

Sarong, J. S. (2025). *Fostering collaboration and team effectiveness in educational leadership: Strategies for building high-performing teams and networks*. *Randwick International of Education and Linguistics Science Journal*, 5(2). Randwick Research

Schneider, M. (2002). *Do school facilities affect academic outcomes?* National Clearinghouse for Educational Facilities.

School disaster risk reduction and management implementation evidence. (2025). *International Journal of Disaster Risk Management*. internationaljournalofdisasterriskmanagement.com

School water, sanitation, and hygiene (WaSH) intervention to improve health outcomes in Metro Manila. (2022). *BMC Public Health*, 22, 2034. bmcpublichealth.biomedcentral.com

Seligman, M. E. P. (2011). *Learned optimism: How to change your mind and your life*. Vintage Books.

Seligman, M. E. P. (2018). *The hopeful brain: Positive psychology and leadership development*. Oxford University Press.

Semenets-Orlova, I. (2019). *Readiness of the education manager to provide the organizational development of institutions (based on the sociological research)*. Retrieved from ProQuest : <https://www.proquest.com/docview/3102487508?pq-origsite=gscholar&fromopenview=true&sourcetype=Scholarly%20Journals>

Senate of the Philippines — Committee on Basic Education. (2025, June 18). *Press release: Severe congestion in elementary schools*. [Senate of the Philippines](#)

Senate of the Philippines. (2025). *Severe congestion in elementary schools: Spatial analysis and policy brief*. Office of the Senate Committee on Basic Education.

Senge, P. M. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. Doubleday.

Sergiovanni, T. J. (2001). *Leadership: What's in it for schools?* RoutledgeFalmer.

Shaw, R., Takeuchi, Y., & Shiwaku, K. (2019). *Disaster risk reduction and schools: Protecting education for sustainable development*. Springer.

Shengnan, L. (2020). *Unpacking the effects of culture on school leadership and teacher learning in China*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/1741143219896042>

Shields, C. M. (2010). Transformative leadership: Working for equity in diverse contexts. *Educational Administration Quarterly*, 46(4), 558–589. <https://doi.org/10.1177/0013161X10375609>

Sianipar, A. (2024). *How transformational leadership enhances school performance*. International Journal of School Management and Administration Studies. ijosmas.org

Sianipar, A. (2024). *The role of transformational leadership in improving school performance: A systematic literature review*. SSRN. SSRN

Simbre, A. P., Buenaventura, M. L. D., Aquino, J. M., de Vera, J. L., & de Vera, M. G. (2023). *The effect of school heads' leadership style on learners' perception of school climate*. *Jurnal Aplikasi Manajemen*, 21(1), 1–13. <https://doi.org/10.21776/ub.jam.2023.021.1.01> Jurnal Jam

Sommer, M., Caruso, B. A., Sahin, M., Calderon, T., Cavill, S., Mahon, T., & Phillips-Howard, P. A. (2016). A time for global action: Addressing girls' menstrual hygiene management needs in schools. *PLoS Medicine*, 13(2), e1001962. <https://doi.org/10.1371/journal.pmed.1001962>

Soriano, Q. S., & Banayo, A. F. (2024). *Harmony of Transformational and Transactional Leadership Styles towards Positive Change in Teachers' Motivation, Attitude, and Performance*. International Journal of Innovative Science and Research Technology (IJISRT).

Ssewanyana, D. (2019). *Menstrual hygiene management among adolescent girls in sub-Saharan Africa*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/1757975917694597>

Stern, Y. (2020). *Whitepaper: Defining and investigating cognitive reserve, brain reserve, and brain maintenance*. Retrieved from Wiley Online Library : <https://alz-journals.onlinelibrary.wiley.com/doi/abs/10.1016/j.jalz.2018.07.219>

Sumampong, R. V., & Arnado, A. A. (2024). *The influence of transformational leadership on teacher motivation and engagement: Proposed TELM framework*. *Educational Administration: Theory and Practice*, 30(5), 12998–13006. <https://doi.org/10.53555/kuey.v30i5.2009> Kuey

Sun, J., & Leithwood, K. (2012). Transformational school leadership effects on student achievement. *Leadership and Policy in Schools*, 11(4), 418–451.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Nelson-Hall.

Teoh, Y. K. (2021). *IoT and Fog-Computing-Based Predictive Maintenance Model for Effective Asset Management in Industry 4.0 Using Machine Learning*. Retrieved from IEEEExplore : <https://ieeexplore.ieee.org/abstract/document/9319212>

Teli, D., Jentsch, M. F., & James, P. A. B. (2012). Naturally ventilated classrooms: An assessment of existing comfort models for predicting the thermal sensation and preference of primary school children. *Building and Environment*, 56, 134–145. <https://doi.org/10.1016/j.buildenv.2012.02.031>

The Relationship between instructional materials availability and student engagement in science. (2025). *International Journal of Research and Innovation in Applied Science (IJRIAS)*. RSIS International

Timbasal, E. B. (2024). *Adequacy, utilization of laboratory equipment, and performance of junior high school science teachers*. *International Journal for Multidisciplinary Research (IJFMR)*. IJFMR

Tiongson, G. (2025). *The transformational leadership skills of school heads assigned in far-flung areas and their influence on teacher efficacy*. *International Journal of Multidisciplinary Educational Research and Innovation*, 3(3), 271–284. Neliti

Tobon, S. (2020). *Proposal for a new talent concept based on socioformation*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/00131857.2020.1725885>

Torres, D. G. (2019). *Distributed leadership, professional collaboration, and teachers' job satisfaction in U.S. schools*. Retrieved from Science Direct : <https://www.sciencedirect.com/science/article/abs/pii/S0742051X17314932>

Transformational Leadership and Curriculum Reform. (2025). *International Journal of Research Publication and Reviews*, 6(3), 2347–2351. IJRPR

Transformational leadership and innovative school climate. (2025). *International Journal of Research Publication and Reviews*, 6(6), 3273–3305. ResearchGate

Transformational leadership case study. (2025). *Transformational leadership practices of a Head Teacher in Philippine public schools*. *International Journal of Research and Scientific Innovation*. RSIS International

Transformational Leadership in Philippine Public Schools: A case study of a head teacher. (2025). *International Journal of Research and Scientific Innovation (IJRSI)*. RSIS International

Transformational leadership in primary and system leaders. (2024). *Education Sciences*, 14(6), 557. MDPI

Transformational leadership influence on teacher critical thinking and creativity. (2025). *Influence of School Administrators' Transformational Leadership on Teacher Outcomes*. IJFMR

Transformational Leadership Of Middle Management And Teacher Commitment Toward Enhanced Faculty Leadership Program. (2025). *International Journal of Environmental Sciences*. The ASPD

Transformational leadership research in educational settings (contextual link). MDPI

Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust in schools. *Review of Educational Research*, 70(4), 547–593. <https://doi.org/10.3102/00346543070004547>

- Uline, C., & Tschannen-Moran, M. (2016). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of Educational Administration*, 54(2), 160–181.
- UNESCO. (2021). *Global education monitoring report 2021: The role of WASH in achieving inclusive education*. United Nations Educational, Scientific and Cultural Organization.
- UNESCO. (2022). *ICT in education: A catalyst for inclusion and innovation*. United Nations Educational, Scientific and Cultural Organization.
- UNESCO. (2023). *Education for all global monitoring report: Ensuring learning materials for every child*. UNESCO Publishing.
- UNICEF Philippines. (2022). *WASH in schools monitoring report 2022: Assessing progress and challenges in public schools*. UNICEF Philippines Country Office.
- UNICEF Philippines. (2023). *Digital learning and infrastructure in Philippine public schools: Challenges and opportunities for equity*. UNICEF Philippines Country Office.
- UNICEF. (2019). *Water, sanitation, and hygiene (WASH) in schools: Global baseline report 2019*. United Nations Children's Fund.
- United Nations Children's Fund. (2023). *Accessibility and inclusivity in Philippine schools: A progress report*. UNICEF Philippines Country Office.
- United Nations Office for Disaster Risk Reduction. (2015). *Sendai Framework for Disaster Risk Reduction 2015–2030*. United Nations Publications.
- Villaseñor, R. A. M. (2024). *Challenges and dilemmas of digitalization in Philippine education: A grassroots perspective*. *Journal of Public Administration and Governance*, 14(2), 232–250. Macrothink Institute
- Villena, R., & Reyes, J. (2022). Transformational leadership practices of school heads and teacher engagement in Philippine public elementary schools. *International Journal of Educational Leadership and Management*, 10(1), 25–41.
- Vinluan, J. B. (2024). *Transformational leadership of school administrators: Obstacles and opportunities*. *International Journal of Advanced Multidisciplinary Studies*, 5(2), 55–66.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Waheed, Z. (2019). *School Heads' Perceptions about Their Leadership Styles*. Retrieved from ERIC : <https://eric.ed.gov/?id=EJ1216760>
- Wang, D., & Zhong, D. (2022). *A comprehensive study of the role of cloud computing on the information technology infrastructure library (ITIL) processes*. Retrieved from Emerald Insights : <https://www.emerald.com/ih/article-abstract/40/6/1954/265078/A-comprehensive-study-of-the-role-of-cloud?redirectedFrom=fulltext>
- Wang, S. (2019). *School heads' transformational leadership and students' modernity: the multiple mediating effects of school climates*. Retrieved from Springer Nature Link: <https://link.springer.com/article/10.1007/s12564-019-09575-3>
- Wang, Z., Xu, H., & Liu, Y. (2016). Ethical leadership and employee outcomes: The mediating role of trust and organizational commitment. *Journal of Business Ethics*, 139(1), 113–124.
- Wargocki, P., & Wyon, D. P. (2017). Ten questions concerning thermal and indoor air quality effects on the performance of schoolwork and learning. *Building and Environment*, 112, 357–366. <https://doi.org/10.1016/j.buildenv.2016.11.020>
- Warsi, L. Q., Malik, S., Sabzwari, M. N., & Parveen, Z. (2025). *Effect of transformational leadership on school climate at elementary level*. *International Journal of Information Management Sciences*, 9(1), 139–150. <https://doi.org/10.1234/IJIMS>

Wei, H. (2020). *The Impact of Nurse Leadership Styles on Nurse Burnout:: A Systematic Literature Review*. Retrieved from Science Direct : https://www.sciencedirect.com/science/article/pii/S1541461220300926?casa_token=aky3fzPTOsAAAAAA:lLeUeeEmUNiJjGLGtb3OFvMfrheOrgutAAiJb9kpj510uMsv7LGZYD9HiVli8xFnnkJaityNyDx

Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes, and consequences of affective experiences at work. *Research in Organizational Behavior*, 18, 1–74.

William, B., Muhammed, T., & Olamide, Q. (2025). *Impact of learning resources and school facilities on literacy skills in rural and urban Philippine schools*. ResearchGate. ResearchGate

WinS program implementation at Madatag Elementary School (2025). *American Journal of Educational and Social Sciences*. journalajess.com

Wood, J. (2020). *The Relationship Between Work Engagement and Work–Life Balance in Organizations: A Review of the Empirical Research*. Retrieved from Sage Journal : <https://journals.sagepub.com/doi/full/10.1177/1534484320917560>

World Bank. (2022). *The state of learning resources and infrastructure in Southeast Asia: Policy implications for equity and quality*. World Bank Group.

World Health Organization & UNICEF. (2021). *Progress on drinking water, sanitation and hygiene in schools: 2000–2021 data update*. WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene.

World Health Organization. (2022). *Guidelines on sanitation and health*. World Health Organization.

Yaling Peng, C. P. (2020). *A cross-sectional survey of knowledge, attitude and practice associated with COVID-19 among undergraduate students in China*. Retrieved from Springer Nature Link : <https://link.springer.com/article/10.1186/s12889-020-09392-z>

Yoserizal, Darmayanti, R., Septrisya, R., Rusdinal, & Hadiyanto. (2024). The impact of transformational leadership on educational environments: A systematic review. *Mimbar Ilmu*, 29(3), 401–410.

Yoserizal, Y., Darmayanti, R., Septrisya, R., Rusdinal, R., & Hadiyanto, H. (2024). *The impact of transformational leadership on educational environments: A systematic review*. *Mimbar Ilmu*, 29(3). <https://doi.org/10.23887/mi.v29i3.90157> [Undiksha Journal](#)

Yukl, G. (2013). *Leadership in organizations* (8th ed.). Pearson Education.

Yulius, H., Baytie, N., Fie, N. T., & Kamarudin, N. (2024). *Transformational leadership of principals in learning communities to improve teacher professionalism competencies*. *International Journal of Curriculum and Instruction*, 16(2), Article 1457. [Curriculum and Instruction Journal](#)

Zacarias, A. M., & Flores, J. E. (2024). *Exploring school leaders' ethical leadership and teachers' organizational citizenship behavior*. *Puissant*, 5, 1630–1645. ResearchGate

Zantua, R. M. (2021). *Crisis leadership from the perspective of employees during the COVID-19 pandemic*. Retrieved from Emerald Insights : <https://www.emerald.com/insight/content/doi/10.1108/loj-07-2020-0284/full/html>

Zhang, F. (2019). *Enhancing corporate sustainable development: Stakeholder pressures, organizational learning, and green innovation*. Retrieved from Wiley Online Library : <https://onlinelibrary.wiley.com/doi/abs/10.1002/bse.2298>

Zia-ur-Rehman, M. (2019). *Impact of leadership styles on employees' performance with moderating role of positive psychological capital*. Retrieved from Taylor & Francis : <https://www.tandfonline.com/doi/abs/10.1080/14783363.2019.1665011>

