Effective Strategies of School Heads in Managing Change and Innovation in Educational Setting in Relation to the Performance of Secondary Teachers

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ABSTRACT

This study investigates the effective strategies employed by school heads in managing change and fostering innovation within the school environment, as well as their impact on the performance of secondary teachers. Utilizing a descriptive-correlational research design, the research focuses on a sample of forty-three secondary school teachers and one school head from Seguinon National High School in the Albuera North District, Leyte Division. To assess the management of change and innovation, the study employed surveys that captured the perceptions of secondary school teachers regarding the strategies implemented by their school head. Specifically, the survey instrument was adapted from the Innovative Managerial Strategies framework developed by Abiodun and Uloma (2015), which evaluates innovative management strategies for enhancing administrative effectiveness in secondary schools. Additionally, the study incorporated elements from the research of Enorme-Lopera and Pinca-Atutubo (2022), which examines the effectiveness of management strategies employed by school heads to evaluate their change management practices. To measure the performance of secondary teachers, the school head utilized the Classroom Observation Tool (COT) for the first quarter. The data were analyzed using simple percentages, weighted means, and Pearson correlation coefficients to determine the relationships between the variables. The findings indicate a significant relationship between the extent of innovative managerial strategies and change management strategies employed by school heads and the performance outcomes of secondary teachers. This underscores the critical role of effective leadership in fostering a culture of innovation and effective change management within educational settings.

Keywords — Effective Strategies, School Heads, Managing Change, Innovation, Educational Setting, Performance, Secondary Teachers

I. INTRODUCTION

School needs a leader. Without a leader, it never functions properly. It cannot serve its main purpose systematically. It will never become efficient and effective in providing education to children. The leader in a school is usually called the school head or principal, most especially in the basic education. They possess qualities for managing the whole system of education. They are expected to be knowledgeable or expert in their different roles. They are likely familiar with the management strategies they must apply or utilize in handling a school and its organization.

Management strategies of school heads depend on the different roles or functions. These things help them become more efficient and effective leaders in school for the achievement of its goals and targets. These strategies grant them the right direction towards having quality service in education. These are the measures to address appropriately the needs of the school system.

In the context of the 21st-century Philippine educational environment, teaching and learning are experiencing notable changes due to the swift advancements in technology and shifts in the demands of the workforce. Teachers are now required to demonstrate innovation, incorporating technology seamlessly into their classroom teaching (Javier,

2021). However, educators encounter various challenges while attempting to integrate technology into their teaching approaches. These challenges encompass unreliable internet connectivity, constrained availability of electronic resources and tools, and a lack of guidance and support regarding technology from school administrations (Del Mundo, 2022).

Further, in the world of education, change is inevitable. New students come in, schools may join a multi-academy trust, changes to educational programs take place and leadership teams change, all of which can bring new ideas and vision to school. In the evr-changing educational landscape, embracing change is essential for progress. Schools, once known for sticking to tradition, are now adapting to better prepare students for challenges of the 21st century. This means trying out new teaching methods, incorporating technology, and focusing more on critical thinking and creativity. It's important for both teachers and students to see that these changes aren't abandoning the past but necessary for improvement. Adapting to these changes helps create a learning environment that reflects the real world, giving students the skills they need to succeed in a constantly changing society.

In the school where the researcher is teaching, people have negative notions about change, especially on the constant changes of the curriculum. Hence, the school head must employ different strategies in managing the teachers to positively adapt to the change which is needed in the improvement of the learners. Further, in the rise of new learning curriculum, teachers had crafted different innovative projects to address the learning gaps that learners are facing. The school heads must be knowledgeable on the programs and projects that teachers are formulating; thus, innovative management strategies must be employed so that these teachers will be guided on their actions, the approaches that they will be employing and the activities they will be provided to the learners. Hence, part of this study is to evaluate the innovative management strategies of the school heads to address the pressing needs of the education sector. A proposed instructional supervisory plan will be formulated based on the findings of the study.

It is in the rationale that the researcher who is currently a grade schoolteacher in the above mentioned local, would like to delve worthy research undertaking that will benefit herself, the school she is currently teaching and that of her Graduate Program she is enrolled at.

This study evaluates the effective strategies of school heads in managing change and innovation in the school setting and performance of secondary teachers in Seguinon National High School, Dagami North District, Leyte Division. The findings of the study were the basis for the proposed instructional supervision plan.

Specifically, this study sought to answer the following questions:

1. What is the extent of innovative managerial strategies of school heads?
2. What is the extent of change management strategies of school heads?
3. What is the extent of the performance of secondary school teachers based on Classroom Observation Tool (COT)?
4. Is there a significant relationship between the extent of innovative managerial strategies and change management strategies of school heads to the performance of secondary school teachers?
5. What instructional supervision plan can be proposed based on the findings of this study?

II. METHODOLOGY

Design. This study employed the descriptive-correlational research design to evaluate the effective strategies of school heads in managing change and innovation in the school setting and performance of secondary teachers. There are forty-three secondary school teachers, and 1 school head involved in the study. Seguinon National High School of Albuera North District, Leyte Division is the main locale of the study. The study utilized surveys in measuring the change and innovation management of school heads as rated by the secondary school teachers. The surveys were divided into 2 parts. Part 1 of the survey is an Innovative Managerial Strategies used by Abiodun & Uloma (2015) in their study on Innovative

Management Strategies for Enhancing Administrative Effectiveness of Secondary Schools in Abeokuta South Education Zone of Ogun State. There are 22 indicators where teachers must rate the extent of innovative management strategies using a Five Point Likert Scale where 5 means Always, 4 means Often, 3 means Seldom, 2 means Rarely, and 1 means Never. While part 2 of the survey was used to evaluate the change management strategies of the school head. The survey was taken from the study of Enorme-Lopera & Pinca-Atutubo (2022) entitled "Effectiveness of Management Strategies of School Heads". There are 20-items included in the survey. This can be answered using a Five-Point Likert Scale where 5 means Always, 4 means Often, 3 means Seldom, 2 means Rarely, and 1 means Never. Further, to measure the performance of secondary school teachers, the researcher gathered the result of the instructional supervision conducted by the school head to the teachers using the Classroom Observation Tool (COT). This research aims to evaluate the significant relationship between the extent of innovative managerial strategies and change management strategies of school head to the performance of secondary school teachers. A proposed instructional supervision plan was formulated based on the result of the study.

Sampling. The respondents of this study were forty-three (43) secondary school teachers, and 1 school head in the above-mentioned locale. Complete enumeration was employed in choosing the respondents of the study.

Research Procedure. After obtaining research approval, data collection commenced. Letters requesting study approval were submitted to relevant authorities. Initially, a request letter was sent to the Schools Division Superintendent for permission to proceed with data collection from identified respondents. Following approval from the SDS, permission letters were also submitted to the Public Schools District Supervisor and School Principal. Upon receiving approvals, the researcher proceeded with data gathering activities. An orientation session was conducted for the respondents, and their consent through permits was obtained to participate in the study. Subsequently, survey questionnaires were distributed, and the researcher guided the respondents in completing them. The researcher also gathered the result of the classroom observation conducted by the school head to measure the performance of secondary school teachers using the classroom observation tool (COT). After the survey phase, data were collected, tallied, and submitted for statistical analysis.

Ethical Issues. The researcher properly secured the permission to conduct the study from the authorities through written communication. In the formulation and utilization of the survey questionnaire that was used in the study, the use of offensive, discriminatory, or other unacceptable language was avoided. The respondents' names and other personal data were not included in this study to protect their privacy. Participation of the respondents was also voluntary through the signed consent asked from them. Orientation was conducted for the respondents. In the orientation, issues and concerns were addressed and consent to be included in the study were signed. The researcher-maintained objectivity in analyzing and discussing the results. All authors whose works were mentioned in this study were properly quoted and were acknowledged in the reference.

Treatment of Data. The quantitative responses underwent tallying and tabulation. Statistical treatment involved using specific tools: Simple Percentage and Weighted Mean evaluate the extent of innovative managerial and change management strategies of school head and performance of teachers using the rating of the secondary school teachers in classroom observation. Pearson r was utilized to ascertain the significant relationship between the dependent and independent variables.

III.   RESULTS AND DISCUSSION

Table 1
Extent of Innovative Managerial Strategies of School Head

	Innovative Managerial Strategies	Weighted Mean	Description	Interpretation
1	Regularly holding meetings with teachers to discuss issues arising to increase their sense of belonging	3.79	Often	High
2	Delegating responsibilities to staff to motivate them to perform	3.68	Often	High

3	Regularly supervising teachers' classroom instructional capabilities	4.01	Often	High
4	Encouraging critical thinking and problem solving among staff to make the school better	4.10	Often	High
5	Regularly organizing staff seminars to train teachers on pedagogical issues	3.77	Often	High
6	Sponsoring teachers to professional teacher's conferences in other states in the country	3.94	Often	High
7	Implementing mentoring program where new teachers are placed under the guidance of experienced teachers	3.98	Often	High
8	Ensuring that audits are done on the school finances	3.89	Often	High
9	Ensuring that audits are on school properties	4.00	Often	High
10	Sourcing school finance through public-private partnerships	4.10	Often	High
11	Sourcing school funds through the establishment of school-based enterprises	4.12	Often	High
12	Encouraging cooperation among school staff to get job done	4.06	Often	High
13	Ensuring that there is a cordial relationship between the school management and the Parent Teachers Association	3.99	Often	High
14	Being available and responsive to members of the school community	3.86	Often	High
15	Encouraging peer evaluation among teachers in the school	3.67	Often	High
16	Ensuring that all team members input are considered in team meetings or deliberation.	3.74	Often	High
17	Ensuring that team decisions are unanimously agreed upon before being adopted.	3.77	Often	High
18	Placing school staff in teams to develop ideas for the school development plans	3.83	Often	High
19	Ensuring that the school's computers and other facilities function well	3.80	Often	High
20	Availing students' opportunity to use information and communication technologies in the school to enhance their learning ability	3.83	Often	High
21	Ensuring that school records are safely kept for future reference	3.90	Often	High
22	Adapting technology to areas of the school administration	3.95	Often	High
	AVERAGE	**3.90**	**Often**	**High**

Legend:

RANGES	*DESCRIPTION*	*INTERPRETATION*
4.21-5.00	*Always*	*Very High*
3.21-4.20	*Often*	*High*
2.61-3.40	*Sometimes*	*Average*
1.81-2.60	*Rarely*	*Low*
1.00-1.80	*Never*	*Very Low*

Table 1 highlights the extent to which school heads employ innovative managerial strategies. The data indicates that the school heads' innovative managerial strategies achieved an average weighted mean score of 3.90, which is interpreted as "high." This suggests that school heads frequently implement innovative approaches in their managerial practices, particularly in conducting instructional supervision of teachers. A high rating in innovative managerial strategies reflects school heads' proactive approach to leadership, embracing new methods to enhance instructional

supervision and teacher support. This high score demonstrates their commitment to fostering a progressive school environment, where change and improvement are welcomed as means of enhancing overall school performance. By actively employing innovative strategies, school heads not only facilitate teacher development but also contribute to creating a responsive, adaptive school culture. Therefore, the high extent of innovative managerial strategies among school heads emphasizes the critical role that forward-thinking leadership plays in the development of effective teaching practices, the adaptability of school staff, and the overall performance of the school. These findings underscore the importance of cultivating innovative leaders who can drive positive change and foster environments conducive to academic and professional growth.

Table 2
Extent of Change Management Strategies of School Head

	Change Management Strategies	Weighted Mean	Description	Interpretation
1	Manages the curriculum initiatives in line with DepEd policies	3.90	Often	High
2	works with teachers in curriculum review	3.98	Often	High
3	enriches curricular offerings based on local needs	3.95	Often	High
4	organizes teams to champion instructional innovation programs toward curricular responsiveness	3.78	Often	High
5	prepares and implements an instructional supervisory plan	3.69	Often	High
6	provides the collegial manner timely, accurate and specific feedback to teachers regarding their performance	3.66	Often	High
7	provides expert technical assistance and instructional support to teachers	3.92	Often	High
8	adapts a research-based school program	4.01	Often	High
9	develops a culture of functional literacy	4.03	Often	High
10	assists in implementing an existing, coherent and responsive school-wide curriculum	3.85	Often	High
11	addresses deficiencies and sustain successes of current programs in collaboration with teachers and learners	3.79	Often	High
12	conducts the instructional supervision using appropriate strategy	3.82	Often	High
13	Manages the procedures in monitoring student achievement	3.99	Often	High
14	ensures the utilization of a range of assessment processes to assess student performance	4.00	Often	High
15	assesses the effectiveness of curricular/co-curricular programs and/or instructional strategies	3.86	Often	High
16	utilizes assessment results to improve learning	3.84	Often	High
17	creates a school process to ensure student progress is conveyed to the students and parents/guardians regularly	3.76	Often	High
18	evaluates lesson plans as well as classroom and learning management	3.80	Often	High
	AVERAGE	**3.86**	**Often**	**High**

Legend:

RANGES	DESCRIPTION	INTERPRETATION
4.21-5.00	*Always*	*Very High*
3.21-4.20	*Often*	*High*
2.61-3.40	*Sometimes*	*Average*
1.81-2.60	*Rarely*	*Low*
1.00-1.80	*Never*	*Very Low*

Table 2 presents the extent to which school heads implement change management strategies in their roles. The data reveals that the school heads' change management strategies obtained an average weighted mean score of 3.86, interpreted as "high." This indicates that school heads frequently apply change management techniques to guide their schools and staff through transitions and adaptations within the educational environment. A high score in change management strategies reflects school heads' proactive approach to managing transitions and facilitating adjustments in school processes, policies, and practices. It demonstrates their ability to guide teachers and staff through changes effectively, minimizing disruption and maintaining a positive, supportive atmosphere. By employing effective change management practices, school heads can ensure smoother transitions and foster resilience among teachers, encouraging them to embrace new initiatives and improvements. Change management strategies employed by school heads are essential in today's rapidly evolving educational landscape. These strategies help build a school culture that is adaptive, collaborative, and focused on continuous improvement. This high score further highlights school heads' readiness to lead their schools through reforms and innovations, empowering teachers to meet new expectations with confidence and motivation.

Table 3-A
Level of Performance Rating for the Proficient teachers

	Performance Indicators	Weighted Mean	Interpretation
1	Apply knowledge and content within and across curriculum learning areas.	4.72	Outstanding
2	Used a range of teaching strategies that enhance learner achievement in literacy and numeracy.	4.63	Outstanding
3	Applied a range of teaching strategies to develop critical and creative thinking as well as other higher-order thinking skills.	4.55	Outstanding
4	Displayed proficient use of Mother Tongue, Filipino and English to facilitate teaching and learning.	5.00	Outstanding
5	Established safe and secure learning environments to enhance learning through the consistent implementation of policies, guidelines and procedures.	4.56	Outstanding
6	Maintained learning environments that promote fairness, respect and care to encourage learning.	5.00	Outstanding
	AVERAGE	**4.74**	**Outstanding**

Legend:

RANGES	INTERPRETATION
4.21-5.00	*Outstanding*
3.21-4.20	*Very Satisfactory*
2.61-3.40	*Satisfactory*
1.81-2.60	*Fairly Satisfactory*
1.00-1.80	*Needs Improvement*

Table 3-A provides a comprehensive assessment of the performance levels of proficient teachers in their instructional supervision, utilizing the Classroom Observation Tool (COT). The data presented reveals that the average weighted mean score for these teachers stands at an impressive 4.74, which is classified as outstanding. This indicates not only a high level of proficiency in instructional supervision but also reflects the teachers' dedication to maintaining

effective teaching practices through diligent observation and feedback mechanisms. the result of the survey highlights the critical role proficient teachers play in fostering an engaging and productive learning environment. The outstanding rating suggests that these educators employ effective strategies for classroom management and instructional delivery, which likely contributes to enhanced student learning outcomes. Furthermore, the utilization of the COT serves as a valuable professional development tool, allowing teachers to engage in reflective practices that bolster their teaching competencies and collaboration with peers. This implies that school head may consider using the COT as a standard practice not only for evaluation but also to encourage ongoing professional growth among teachers. Recognizing the strengths demonstrated in instructional supervision can foster a culture of excellence within educational institutions, motivating educators to strive for continual improvement. Ultimately, prioritizing such assessments can lead to the overall enhancement of teaching and learning experiences across the educational landscape.

Table 3-B
Level of Performance Rating for the Highly Proficient teachers

	Performance Indicators	Weighted Mean	Interpretation
1	Modified effective application of content knowledge and within and across curriculum learning areas.	5.00	Outstanding
2	Developed and applied teaching strategies to promote critical and creative thinking as well as other higher-order thinking skills.	5.00	Outstanding
3	Modified and supported colleagues in the proficient use of Mother Tongue, Filipino and English to improve teaching and learning as well as developed the learner's pride of their language, heritage and culture.	5.00	Outstanding
4	Exhibited effective strategies that ensure safe and secure learning environments to enhance learning through the consistent implementation of policies, guidelines and procedures.	5.00	Outstanding
5	Exhibited effective practices to foster learning environments that promote fairness, respect and care to encourage learning.	5.00	Outstanding
6	Exhibited a learner-centered culture that promotes success by using teaching strategies that responds to their linguistic, cultural, socio-economic and religious backgrounds.	5.00	Outstanding
7	Developed and applied teaching strategies to address effectively the needs of learners from indigenous groups.	5.00	Outstanding
	AVERAGE	**5.00**	**Outstanding**

Legend:

RANGES	*INTERPRETATION*
4.21-5.00	*Outstanding*
3.21-4.20	*Very Satisfactory*
2.61-3.40	*Satisfactory*
1.81-2.60	*Fairly Satisfactory*
1.00-1.80	*Needs Improvement*

Table 3-B offers a detailed evaluation of highly proficient teachers' performance in instructional supervision using the Classroom Observation Tool (COT). The data reveals an outstanding average weighted mean score of 5.00, highlighting the exceptional effectiveness of these educators in implementing best practices. This remarkable score indicates that highly proficient teachers excel in providing insightful feedback and fostering collaboration, which positively impacts student engagement and achievement. The results suggest that the strategies utilized by these high-performing teachers can serve as a model for professional development initiatives, encouraging all educators to adopt similar standards. Recognizing and celebrating this level of excellence can create a culture of continuous improvement, ultimately enhancing overall educational outcomes for students.

Table 4
Test of Relationships

Variables Correlated	r	Computed value or t	Table Value @.05	Decision on Ho	Interpretation
Innovative Managerial Strategies to Teaching Competence	0.69	0.667	0.227	Reject Ho	Significant Relationship (Moderate)
Change Management Strategies and the Teaching Competence	0.66	0.654	0.227	Reject Ho	Significant Relationship (Moderate)

Table 4 presents the results of tests examining the relationships between innovative managerial strategies and change management strategies used by school heads and their impact on the performance of secondary school teachers. The correlation coefficients reveal moderate significant relationships, with Innovative Managerial Strategies at r=0.69 and Change Management Strategies at r=0.66. The computed values of 0.667 and 0.654 exceed the critical table value of 0.227 at a significance level of 0.05, leading to the rejection of the null hypothesis (Ho) and confirming a statistically significant relationship between these managerial strategies and teacher performance. These findings underscore the importance of effective managerial practices in enhancing teacher performance. The strong correlations suggest that innovative and change-focused strategies adopted by school heads can significantly boost teacher effectiveness, creating a more dynamic educational environment. These results highlight the need for school leaders to embrace innovative and change management strategies, as doing so may lead to improved teacher performance and better student outcomes. Investing in the professional development of school heads can foster a supportive environment that enhances teacher satisfaction and growth, ultimately contributing to a more effective educational system.

IV. CONCLUSIONS

Effective leadership plays a crucial role in enhancing teaching performance as it reveals on the findings of the study that there is a moderate significant relationship between the extent of innovative managerial strategies and change management strategies employed by school heads and the performance outcomes of secondary teachers. This relationship suggests that when school heads actively implement innovative managerial strategies and effectively manage change, it positively influences teachers' ability to perform in the classroom. The findings indicate that a supportive and adaptive leadership approach can create an environment conducive to improved instructional practices and overall teacher effectiveness. Moreover, this underscores the importance of equipping school heads with the necessary skills and strategies for managing innovation and change. By prioritizing these aspects, educational institutions can foster a culture of continuous improvement, ultimately benefiting student outcomes and the overall quality of education. Thus, investing in the professional development of school heads in these areas is essential for achieving better performance from secondary school teachers.

V. RECOMMENDATIONS

1. Utilize the proposed instructional supervision plan formulated to achieve the desired goal of the study.
2. Engage teachers in setting performance and school improvement goals, which can foster ownership and motivate them to strive for excellence.

3. Provide regular training sessions, workshops, and seminars focused on the latest teaching methodologies, classroom management, and innovative practices.

4. Demonstrate adaptability by tailoring management styles based on teachers' individual needs and strengths.

5. Allow teachers some flexibility in implementing new strategies and adapting to changes, fostering an environment where they feel trusted and capable of taking initiative.

6. Use data to guide decisions on teacher evaluations and areas needing improvement, adjusting based on what will directly impact teacher performance.

7. Establish clear, open lines of communication where teachers feel comfortable discussing challenges related to change and innovation.

8. Recognize teachers who adopt innovative methods and contribute positively to the school environment through formal awards, public recognition, or even small incentives.

9. Teachers must be open to learning new strategies and teaching techniques that align with school innovations.

10. Engage in peer mentoring and collaborative planning to exchange ideas and support each other in implementing new strategies effectively.

11. Embrace technology and modern educational tools to enhance teaching practices, and

12. Future researchers should replicate this study to include different locales and include different variables aside from the mentioned in this study.

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REFERENCES

[1] Abdullah, A. G., Ling, Y., Ping, C. S., & Yusoff, Z. B. (2016). The influence of workplace happiness towards innovative behavior and affective commitment among the teachers in Northern Peninsular Malaysia. doi:10.18535/rajar/v2i4.02

[2] Abun, D. et al. (2023). The effect of innovative work environment on the innovative work behavior of employees. https://hal.science/hal-04091739

[3] Akomolafe, C. O. (2012). A comparative study of principals' administrative effectiveness in public and private secondary schools in Ekiti State, Nigeria. Journal of Education and Practice, 3 (13), 39-45.

[4] Almarshad, Y. (2017). The effects of instructional, transformation and distributed leadership on students' academic outcomes: A meta -analysis. https://doi.org/10.5296/ije.v9i2.10263

[5] Alsaedi, A. et al. (2022). Impact of inclusive leadership on team voice and innovation. https://www.researchgate.net/publication/374388776

[6] Amoatemaa, A. & Kyeremeh, D. (2016). Making employee recognition a tool for achieving improved performance: Implication for Ghanaian Universities. https://files.eric.ed.gov/fulltext/EJ1126683.pdf

[7] Amor, A. et al. (2021). Structural empowerment, psychological empowerment, and work engagement: A cross-country study. https://www.sciencedirect.com/science/article/pii/S0263237321000050

[8] Ampofo, S., Onyango, G. & Ogola, M. (2019). Influence of school heads' direct supervision on teacher role performance in public senior high schools, Central Region, Ghana. https://files.eric.ed.gov/fulltext/EJ1236226.pdf

[9] Annida, S. & Harsanti, I. (2019). Challenge at work: Innovative work behavior among teachers. http://creativecommons.org/licenses/by-nc/4.0/

[10] Ariratana, W., Ngang, T. K., & Sirisooksilp, S. (2019). The effect of innovative leadership on competency of creating high performance organization. https://doi.org/10.34044/j.kjss.2019.40.2.03

[11] Ateş, A. (2021). The relationship between parental involvement in education and academic achievement: A meta-analysis study. https://files.eric.ed.gov/fulltext/EJ1305014.pdf

[12] Australian Council for Educational Explorer. (2023). School improvement tool. https://research.acer.edu.au/cgi/viewcontent.cgi

[13] Ayoup, H., Omar, N., & Rahman, I. (2016). Balanced scorecard and strategic alignment: A Malaysian case. http://www.econjournals.com/

[14] Aytekin, G. (2021). Exploration of principals' leadership qualities and their associations with a school learning environment and school outcomes. https://huskiecommons.lib.niu.edu/allgraduate-thesesdissertations/6833

[15] Baharudin, M., Masrek, M., & Shuhidan, S. (2019). Contextualizing work engagement and innovative work behaviour: The mediating role of learning goal orientation. http://ijaedu.ocerintjournals.org/en/download/article-file/801604

[16] Bascope, M., Perasso, P., & Reiss, K. (2019). Systematic review of education for sustainable development at an early stage. https://www.mdpi.com/2071-1050/11/3/719

[17] Bawuro, F. A., Danjuma, I., & Wajiga, H. (2018). Factors influencing innovative behaviour of teachers in secondary schools in the North East Of Nigeria. Path of Science, 4(3), 1007-1017. doi:10.22178/pos.32-9

[18] Becker, B. (2023). Leadership styles. https://blog.hubspot.com/marketing/leadership-styles Bevilacqua, R., Freitas, V., & de Paula, V. (2020). Innovation and brands. https://www.redalyc.org/journal/1230/123075326005/html/

[19] Bhatracharya, R. (2021). Need for technical skills in education and training. https://www.linkedin.com/pulse/need technical-skills-education-training-rangaraj-bhatracharya

[20] Bika, N. (n.d.). How to conduct a structured interview. https://resources.workable.com/tutorial/conduct-structured interview

[21] Blanch, J. et al. (2022). Authentic leadership and innovation. https://www.worldscientific.com/doi/10.1142/S0219877021400046

[22] Bogiannidis, N., Southcott, J. & Gindidis, M. (2023). An exploration of the possible educational opportunities and the challenges at the intersection of the physical and digital worlds occupied by 10–14 year-old students. https://doi.org/10.1186/s40561-023-00246-w

[23] Bordia, D. (2022). Roles and responsibilities of a vice principal. https://blog.teachmint.com/roles-and-responsibilities-of a-vice-principal/

[24] Botella, M., Zenasni, F., Lubart, T. (2018). What are the stages of the creative process? https://www.frontiersin.org/articles/10.3389/fpsyg.2018.02266/full

[25] Burns, M & Larie, J. (2016). Recommendations to improve teacher professional development in fragile contexts. https://www.globalpartnership.org/blog/7-recommendations-improve-teacher-professional-development-fragile contexts

[26] Camacho, A. (2023). Empowerment in the workplace and why it is important. https://www.outsourceaccelerator.com/articles/empowerment-in-the-workplace/

[27] Cherry, K. (2023). How transformational leadership can inspire others. https://www.verywellmind.com/what-is transformational-leadership-2795313

[28] Choi, W., Kang, S., & Choi, S. (2021). Innovative behavior in the workplace. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8698413/ 29.

[29] Chou, C., Shen, C., Hsiao, H. & Chen, S. (2010). The influence of innovative organizational management of technological and vocational schools on innovative performance–using organizational innovative climate as the mediator variable. World Transactions on Engineering and Technology Education, 8(2), 237-242.

[30] Clennan, K. (2021). Employee innovation to promote employee engagement. https://scholarworks.montana.edu/xmlui/bitstream/handle/1/16248/clennan-employee-2021.pdf

[31] Climate, C. (2016). The mediating role of psychological empowerment on the relationship between creative climate and innovative work behavior: The case of employees of various sectors in Turkey.

[32] Conroy, T. & Ehrensal, P. (2021). Values and ethics in educational administration. https://files.eric.ed.gov/fulltext/EJ1304345.pdf

[33] Contresas, F. et al. (2017). Leadership and employees' innovative work behavior: Test of a mediation and moderation model. https://repository.urosario.edu.co/server/api/core/bitstreams/840384bd-3348-46b7-98a0-0cfc92095bd0/content

[34] Coun, M. et al. (2021). Leading innovative work-behavior in times of COVID-19. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.717345/full

[35] Courseera. (2023). What are technical skills? https://www.coursera.org/articles/what-are-technical-skills

[36] Croeser, E. (2023). How to enhance decision-making in innovation. https://www.itonics-innovation.com/blog/innovation-dashboards-for-enhanced-decision-making

[37] Dacre, M. (2017). Deliberative acts; A theory of school leadership. https://mro.massey.ac.nz/bitstream/handle/10179/13360/02_whole.pdf

[38] Daly, C. (2021). Ways to achieve team alignment in your organization. https://thoughtexchange.com/blog/5-ways-to achieve-team-alignment-in-your-organization/

[39] Darling-Hammond, L. (2017). Effective teacher professional development. https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf

[40] Darling-Hammond, L. (2020). Implications for educational practice of the science of learning and development. https://www.tandfonline.com/action/showCitFormats

[41] Day, C. & Sammons, P. (2020). Successful school leadership. https://files.eric.ed.gov/fulltext/ED614324.pdf

[42] Day, C., Gu, X., & Sammons, P. (2016). The impact of leadership on student outcomes. https://www.researchgate.net/publication/293807420

[43] De Paris, L. (2017). Design thinking and managerial education, from theory through practice. http://dspace.unive.it/bitstream/handle/10579/12395/845322-1211673.pdf?sequence=2

[44] Dearing, J. & Cox, J. (2018). Diffusion of innovations. https://www.healthaffairs.org/doi/10.1377/hlthaff.2017.1104

[45] Debora, D. (2022). Goal-setting theory: Why it's important, and how to use it at work. https://www.betterup.com/blog/goal-setting-theory

[46] Denomme, D. & Davis, O. (2021). Technical skills in management overview & examples. https://study.com/academy/lesson/what-are-technical-skills-in-management-definition-examples-quiz.html

[47] Dieffenbacher, S. (2023). Opportunity identification. https://digitalleadership.com/glossary/opportunity-identification/

[48] Durasic, M. & Bunijevac, M. (2017). Parental involvement as a important factor for successful education. https://files.eric.ed.gov/fulltext/EJ1156936.pdf

[49] Education Development Center. (2019). Building a culture of continuous improvement. https://www.edc.org/sites/default/files/uploads/EDC-Building-Culture-Continuous-Improvement.pdf

[50] Euchner, J. (2020). Innovation and globalization, research-technology management. https://www.tandfonline.com/action/showCitFormats?doi=10.1080%2F08956308.2020.1813500

[51] Federal Republic of Nigeria (2013). National Policy on Education. NERDC Press.

[52] Manea, A.D. (2015). Innovation in the management of educational institutions. Procedia - Social and Behavioral Sciences, 209, 310 – 315

[53] Marija, C., Slavko, K. & Gordana, G. (2013). Innovative management in education using communication instruments. Innovative Management, 3-4, 88-108.

[54] Mohammad, A. & Hian, Z. (2017). The degree of schools principals practicing innovation and its relation with the teachers' professional development. Journal of Education and Practice, 8(8), 20 36.

[55] Muraina, M.B. (2014). Principals' managerial skills and administrative effectiveness in secondary schools in Oyo State, Nigeria. Global Journal of Management and Business Research: Administration and Management, 14(3), 51-57.

[56] Nwokolo, P. E. & Sam-Kalagbor, V.O. (2019). Principal staff management strategies and effective administration in public secondary schools in Rivers. International Journal of Innovative Social & Science Education Research 7(4), 102-111.

[57] Omur, Y.E. & Argon, T. (2016). Teacher opinions on the innovation management skills of school administrators and organizational learning mechanisms. Eurasian Journal of Educational Research, 66, 243-262.

[58] Onwubuya, U. (2017). Extent of principals' management practices in public and private secondary schools in Anambra state. (A Masters' Thesis, Department of Technology and Vocational Education, Faculty of Education, Nnamdi Azikiwe University, Awka).

[59] Sanchez, A., Lago, A., Ferra, X. & Ribera, J. (2011). Innovation management practices, strategic adaptation, and business results: Evidence from the electronics industry. Journal of Technology Management & Innovation, 6 (2), 15-39.

[60]Stan, C. (2014). The involvement of the universities in adult education – compulsion or necessity? Procedia - Social and Behavioral Sciences, 142, 214 – 219.