



Knowledge Management Practices and Teaching Effectiveness of Public Elementary Teachers in Davao Del Norte Division

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ABSTRACT

The study determined the extent of knowledge management practices and the teaching effectiveness of public elementary teachers in Davao Del Norte Division. It also explored the relationship of knowledge management practices and teaching effectiveness of teachers since this had never been explored specifically in the local setting. It employed probability sampling. Hence, there were 150 elementary teachers in the public schools who were selected as the respondents. Utilizing the descriptive-correlational survey method, the data collated were analyzed through the use of Mean and Product-Moment correlation. It was revealed that there was an extensive knowledge management practices and an extensive teaching effectiveness. Furthermore, there was a significant relationship between the two variables. Dwelling on the findings of the study, it was further suggested that higher officials in the Department of Education and school heads may identify concrete means, programs, initiatives on how to strengthen the knowledge management practices to ensure effectiveness in teaching among the teachers. More so, future researchers may further explore the involved variables considering other factors and research methods.

Keywords: Descriptive correlation, knowledge management practices, teaching effectiveness, Davao Del Norte Division, Philippines

Introduction

Teaching effectiveness refers to both the quality of teaching and the capability of teachers. It requires teachers to continually enhance practice by adopting an evaluative mind-set. Teaching effectiveness is informed by growth-focused evaluations of teaching practice, indicators of learning and wellbeing, and is facilitated by a positive school culture. An educational culture that encourages and supports teachers with their continuous growth and development contributes to improving the standards of teaching and outcomes for learners. Teaching effectiveness can also be inferred from tests of teachers' knowledge or skills; teachers' participation in professional development, committees, or mentoring; instructional artifacts, including lesson plans and assignments; teacher self-reporting, including instructional logs; and input provided by parents, peers, or administrators [1]. However, attaining teaching effectiveness has been a challenge for several reasons.

In Zimbabwe, there were identified factors contributing to ineffective teaching. It was revealed that teachers do not employ a variety of teaching methods. They do not prepare a variety of media for use in the teaching and learning. Teachers' instructional materials are limited to textbooks and syllabuses and do not go beyond that [2]. Pupils learn in harsh and uncondusive teaching and learning environments and there is low morale among teachers. Parental support in terms of extra materials such as text books and revision books are very low. Only a small proportion of parents guide their children on homework. They do not provide extra lessons for their children. Schools lack adequate textbooks, revision books and resource books to extend children's knowledge. Moreover, teachers are reported to be one of the groups who experience a high dose of daily stress [3].

In 2017, various incidents on work-related stress were reported to have been affecting Filipino Workers. CNN PH poll entitled Filipino Top Causes of Stress in 2017 reported that 23 percent of the Filipinos were experiencing work-related stress such as management, deadlines, workload, and sometimes co-worker [4]. Dealing with these types of stress, it can contribute to low quality output and a risk for [5]. Chronic stress or work-related stress can affect the effectiveness of the teachers, and it is reported to be connected to a high turnover rate, absenteeism, disengagement to work, and demotivation.

In Davao del Norte Division, it was observed that teachers were ineffective in teaching for some professional reasons. Teachers experienced to have insufficient training and expertise in effective teaching methods, classroom management, and instructional strategies. They also manifested inadequate knowledge of subject matter. More so, teachers had been experiencing burnout, stress, or a lack of motivation which restrained them to deliver effective teaching due to diminished energy, enthusiasm, and commitment to their profession.

The researcher noticed these aspects through direct observation, as no specific study regarding teaching effectiveness within the local context, taking into account the knowledge management practices of schools, was found. Due to this, the researcher was motivated to delve into the depth of knowledge management practices and how they were related to the effectiveness of teaching among educators. The primary objective was to analyze the correlation between these two variables.

This initiative also aspired to offer valuable insights to policymakers, aiding in the development of informed policies, programs, interventions, projects, and activities. These endeavors were intended to encourage all school administrators to enhance and fortify their knowledge management practices, ultimately empowering them to support teachers in achieving greater effectiveness in their teaching roles. Additionally, the researcher was committed to sharing the findings of this study in various platforms - local, national, and international forums - and to seeking publication in a reputable journal.

This study was based primarily on Knowledge Management Practices [6]. Eisner's work offers a framework which is integrated and he suggests that the results of an experience of learning include the outcomes of specific subject, learner and specific teacher. The definition of knowledge management (KM) embraces activities of an organization to manage assets about knowledge. Moreover, there are definitions of knowledge management but in general, its purpose is to raise a corporation's innovation and economic activities [7]. Ratherly, KM is considered to be a problem-solving device, which improves knowledge exploration and knowledge exploitation success of organizations [8]. Therefore, KM becomes more important: it can be considered as a managerial instrument which can support the essential process of creating and sharing knowledge for organizations, individuals and especially for students.

Knowledge management is to gain the objectives of organization by exploiting and developing the knowledge assets. Management includes all of those processes related to the identification, sharing and creation of knowledge. He suggested that it is important for organizations to clearly identify the central objective, levels and scope of knowledge management, technologies and techniques used for knowledge management, as well as the role of organization [9] [10].

The basic definitions of knowledge management and discussed that KM is a complex field that comprises different, hard and abstract aspects: technical problems about KM tools, organizational problems associated with the structure, culture and context within which these tools can be used and the educational organization that may result from their use and basic epistemological problems about the approach and definition to the study of KM [11].

There are some studies that showed knowledge management has a good effect on improving organizational effectiveness [12]. The elements of Knowledge Management Infrastructure comprises: technology, structure, culture and human resources. The study also stated 4 elements of knowledge management are conversions, acquisitions, protections and applications storing. This research also investigated the role of knowledge management in ameliorating the organizational effectiveness in some organizations in Egypt and solved its relationship with performance improvement. As follows, significant relationship between knowledge management elements and performance improvement measures, which proved organizational knowledge's quality used in decision-makings in the organizations. The article also shows the role of concentrating on building a knowledge environment formed by appropriate factors of Knowledge Management Infrastructure [13].

Relevant to teaching effectiveness, school teachers are playing prominent role in managing their scarce knowledge and expertise to transform the educational activities in local schools. In spite of just delivering lessons, teachers in 21st century need to be more responsible on assessing and enriching the existing knowledge. Therefore, an effective effort on knowledge management among school teachers is much needed as a foundation in transforming educational system along with globalization [14].

It is very clear that teachers in schools have much to gain from knowledge management practice. Hence, it is not surprising that adopting knowledge management in school setting will be the ideal strategy to transform education. As an initial step of knowledge management implementation in schools, teachers need to equip themselves well on how to manage the knowledge [15]. By doing this, teachers can improve the quality of their teaching practice by managing the available information and knowledge [16].

Methodology

Research Design

In this study, a quantitative research approach was employed, specifically utilizing a descriptive correlational technique. Quantitative research methods involve the collection of numerical data and its subsequent mathematical analysis, often incorporating statistical tools. Descriptive research is characterized by a hands-off approach from the researcher, where the variables under study are observed without any manipulation [17]. On the contrary, a correlational investigation seeks to establish whether there exists an association between two variables [18].

This study was categorized as quantitative since it relied on numerical data for data analysis and interpretation. It was descriptive since its goal was to evaluate knowledge management practices and teaching effectiveness. This academic endeavor was also correlational because it aimed to evaluate the relationship between knowledge management practices and teaching effectiveness of public elementary teachers in Davao del Norte Division.

Research Respondents

There were 150 public elementary teachers who were invited to answer and be part of this study. It was claimed that for simple regression analysis, it needed at least 50 samples and generally 100 samples for most research situations [19]. Hence, the 150 respondents were enough to address the purpose of this study.

In the inclusion and exclusion criteria, elementary teachers with 5 years teaching experience were chosen in this endeavor since their 5 years stay in the public school helped them to assess the school's knowledge management system and how it affected teachers' teaching effectiveness. Respondents who

felt awkward and uncomfortable in answering the survey questionnaire were free to withdraw from their participation. They were not forced to be part of the study. Their decision to withdraw was respected. Apparently, the respondents' welfare was given utmost importance in the conduct of the study.

Research Instruments

The knowledge management practices questionnaire had six indicators, namely: knowledge management strategy and plan (1-5), support for organizational learning (1-6), organizational performance management practice (1-5), training related practice, and human resource related practice self-management (1-5) [20]. The questionnaire was subjected to a pilot testing having a result of .73 suggesting that the items have relatively *high* internal consistency.

The teaching effectiveness questionnaire had a total of 27 items [21]. It had four indicators, namely: assessment and evaluation (1-13), interaction with students (1-5), teaching and learning (1-7), preparedness of teachers (1-4). The questionnaire was subjected to a pilot testing having a result of .74 suggesting that the items have relatively *high* internal consistency.

The instruments in this study were contextualized to achieve the purpose of this study. The researcher integrated all the comments and suggestions of the adviser, panel members and expert validators for the refinement of the tools and to achieve construct validity.

Table

Table 1

Summary on the Extent of Knowledge Management Practices

Table 1 provides the summary on the extent of knowledge management practices. It is exhibited that the overall mean of knowledge management practices is 3.53, which is in an extensive level. This means that knowledge management practices are oftentimes evident.

Data show that all five (5) indicators are in an extensive level. As arranged chronologically, knowledge management strategy and plan have the highest mean score (3.58). This is followed by human resources related practices (3.56), training related practices (3.54), support for organizational learning (3.48) and organizational performance management practices (3.48).

No	Indicators	Mean	Descriptive Equivalent
1	Knowledge Management Strategy and Plan	3.58	Extensive
2	Support for Organizational Learning	3.48	Extensive
3	Organizational Performance Management Practices	3.48	Extensive
4	Training Related Practices	3.54	Extensive
5	Human Resource Related Practices	3.56	Extensive
Overall		3.53	Extensive

The results indicate a prevalent and robust implementation of knowledge management practices within the organization, as reflected by extensive mean scores across all five indicators. Notably, knowledge management strategy and plan emerge with the highest mean score showcasing a strong commitment to strategic planning for knowledge utilization and sharing. Following closely are human resources related practices underscoring the organization's emphasis on integrating knowledge management into competency, training, and performance assessments. Training-related practices, support for organizational learning, and organizational performance management practices also receive substantial mean scores, further highlighting the organization's holistic approach to knowledge management across various dimensions. These findings collectively suggest a comprehensive strategy where knowledge is not only strategically planned but also embedded in human resource processes, training initiatives, organizational learning support, and performance management practices, showcasing a well-rounded and proactive stance towards leveraging knowledge for organizational effectiveness.

Through comprehensive knowledge management practices, this reiterates the widely accepted viewpoint that knowledge management practice involves the translation of ideas into action during the execution of job functions. Knowledge management practices encompass various aspects such as understanding knowledge management, which includes knowledge generation, acquisition, organization, storage, transfer, sharing, and retention. The benefits of employing knowledge management practices extend to refocusing organizations on utilizing their existing knowledge, fostering an environment conducive to innovation rather than confining themselves to best practice solutions, facilitating the convergence towards knowledge portals as opposed to isolated knowledge silos within an organization, and promoting interconnectedness among departments, employees, and systems [22].

Similarly, it was proposed that in an academic institution, the implementation of knowledge management practices can result in enhanced decision-making capabilities, reduced cycle time for product development (e.g., curriculum development and research), improved academic and administrative services, and lowered costs. It was asserted that teachers epitomize knowledge workers, engaging in diverse knowledge-related activities such as collecting teaching materials, drafting teaching plans, accumulating educational resources, conducting classroom teaching, assessing students' learning, and reusing learning outcomes. These activities involve a sequence of knowledge production, creation, accumulation, transfer, and utilization within the framework of knowledge management. Proficiency in knowledge management stands as one of the essential abilities for teachers to align with the knowledge society and stay abreast of the times [24].

Table 2**Summary on the Extent of Teaching Effectiveness**

No	Indicators	Mean	Descriptive Equivalent
1	Assessment and Evaluation	3.59	Extensive
2	Interaction with Students	3.61	Extensive
3	Teaching and Learning	3.58	Extensive
4	Preparedness of Teachers	3.58	Extensive
Overall		3.59	Extensive

Table 2 provides the summary on the extent of teaching effectiveness. It is exhibited that the overall mean of teaching effectiveness is 3.59, which is in an extensive level. This means that the teaching effectiveness is oftentimes evident.

Data show that all four (4) indicators are in an extensive level. As arranged chronologically, interaction with students has the highest mean score (3.61). This is followed by assessment and evaluation (3.59), teaching and learning (3.58) and preparedness of teachers (3.58).

The results indicate a consistent and extensive demonstration of teaching effectiveness across all four indicators. Notably, interaction with students emerged with the highest mean score, underscoring the organization's commitment to fostering positive and inclusive teacher-student relationships. Following closely are assessment and evaluation, teaching and learning, and the preparedness of teachers, each with substantial mean scores, suggesting a holistic approach to effective teaching practices. The emphasis on diverse aspects of teaching, including interpersonal interactions, assessment practices, instructional strategies, and teacher preparedness, collectively reflects a well-rounded commitment to creating a conducive and impactful learning environment. These extensive results affirm the organization's dedication to multifaceted teaching effectiveness, showcasing a comprehensive approach that prioritizes various dimensions crucial for fostering positive student experiences and academic success.

The positive outcomes of this research aligned with the findings that an effective teacher is not just someone who explores ways to bring out the best in their students but also possesses an academic orientation and accomplishes classroom goals through a focus on academic instruction. These effective teachers showcase their proficiency by actively engaging students in classroom discussions, posing questions, and providing feedback on student progress. Additionally, they employ a diverse teaching approach to present a range of content, ensuring student engagement. Furthermore, an effective teacher instills confidence in their students and guides them with high expectations [25].

Moreover, it was emphasized the pivotal role of teacher expectations in shaping student success in their groundbreaking work. They proposed that teacher expectations, whether elevated or diminished, manifest as self-fulfilling prophecies, thereby impacting student achievement [26]. Building on this psychological dimension of teaching effectiveness, the importance of feedback in the learning process, suggesting that timely and specific feedback can significantly enhance student outcomes [27].

Table 3**Significance of the Relationship Between the Extent of****Knowledge Management Practices and Teaching Effectiveness**

Knowledge Management Practices Indicators	Dependent Variable	r-value	p-value	Decision on Ho
Knowledge Management Strategy and Plan		0.463	0.000	Rejected
Support for Organizational Learning		0.458	0.000	Rejected

Organizational Performance Management Practices	Teaching Effectiveness	0.456	0.000	Rejected
Training Related Practices		0.460	0.000	Rejected
Human Resource Related Practices		0.462	0.000	Rejected
Overall		0.612*	0.000	Rejected

*Significant at 0.05 significance level.

Presented in Table 3 are the data on the significance of the relationship between knowledge management practices and teaching effectiveness. Reflected in the hypothesis, the relationship was tested at 0.05 level of significance. The overall r-value of .460 with a p-value of <0.05 signified the rejection of the null hypothesis. It means that there is a significant relationship between knowledge management practices and teaching effectiveness. This shows that knowledge management practices are correlated with the teaching effectiveness of teachers.

Doing a pairwise correlation among the measures of both variables, it can be gleaned that knowledge management strategy plan, support for organizational learning, organizational performance management practices, training related practices, and human resource related practices revealed computed r-values of 0.463, 0.458, 0.456, 0.460, and 0.462 respectively with p-values which are less than 0.05 in the level of significance. This implies that as knowledge management strategy plan, support for organizational learning, organizational performance management practices, training related practices, and human resource related practices increase, the teaching effectiveness increases.

The overall findings, indicated by an r-value of .460 with a p-value <0.05, decisively reject the null hypothesis and signify a significant relationship between knowledge management practices and teaching effectiveness. This underscores the interconnectedness of effective knowledge management within an educational setting and the positive impact it has on teaching outcomes. The pairwise correlation further reveals that various dimensions of knowledge management, including knowledge management strategy plan, support for organizational learning, organizational performance management practices, training-related practices, and human resource-related practices, exhibit significant positive correlations with teaching effectiveness. These results emphasize the importance of a comprehensive approach to knowledge management within educational institutions, as it not only enhances organizational processes but also positively correlates with the effectiveness of teaching practices, ultimately contributing to a more successful and impactful learning environment.

The outcome aligned with the research which introduces the idea that organizational knowledge can serve as a strategic asset. When applied to educational institutions, this concept suggests that effective management of teacher knowledge has the potential to elevate teaching quality and improve student outcomes [28]. It was emphasized the importance of knowledge sharing among educators. He posited that to achieve continuous improvement in teaching methods, knowledge management practices fostering a culture of shared learning and innovation are indispensable [29].

In a similar vein, it was introduced a contemporary perspective, exploring the impact of digital technologies on knowledge management practices in teaching [30]. It was also revealed that, given the abundance of online resources, teacher networks, and professional platforms, knowledge management now involves adeptly navigating, curating, and sharing digital content, all of which can influence teaching effectiveness. The literature indicates a mutually beneficial relationship between knowledge management practices and teaching effectiveness [31].

Conclusions

Based on the findings of this study, the following conclusions were offered:

The extent of knowledge management practices in the public elementary schools implies that it is oftentimes evident. In fact, all dimensions are oftentimes evident, namely, knowledge management strategy plan, support for organizational learning, organizational performance management practices, training related practices, and human resource related practices.

Meanwhile, the extent of teaching effectiveness of teachers is oftentimes evident. Apparently, all indicators are found to be oftentimes evident specifically on assessment and evaluation, interaction with students, teaching and learning, and preparedness of teachers.

Based on the findings, knowledge management practices and teaching effectiveness are related. This leads to the rejection of the null hypothesis.

Recommendations

The following suggestions were offered based on the conclusions of the study:

The higher officials in the Department of Education may acknowledge and capitalize on the extensive knowledge management practices evident within the education system. Prioritizing professional development programs that reinforce effective knowledge sharing, organizational learning, and supportive human resource practices may contribute to even more robust teaching outcomes. Additionally, promoting collaborative platforms and technological tools to facilitate seamless knowledge exchange among educators can amplify the positive impact on teaching effectiveness. Emphasizing these aspects will not only enrich the overall teaching and learning experience but also foster a culture of continuous improvement within the education system.

Moreover, school heads may recognize and actively support the extensive knowledge management practices already in place within their institutions. Given the evident correlation with teaching effectiveness, school leaders may encourage a culture that values collaborative knowledge sharing, embraces innovative instructional approaches, and prioritizes ongoing professional development. Providing platforms for educators to share best practices, fostering a supportive environment for organizational learning, and implementing efficient knowledge management strategies may further enhance teaching outcomes. School heads may also consider leveraging technology to facilitate seamless information exchange and collaboration among teachers.

Furthermore, teachers may actively engage and participate in the extensive knowledge management practices within their educational settings. Embracing collaborative knowledge-sharing platforms, actively contributing to organizational learning initiatives, and taking advantage of professional development opportunities may significantly enhance individual teaching effectiveness. Teachers may recognize the value of ongoing learning, both from their colleagues and through personal development efforts, as a means to continually refine instructional methods and strategies. Embracing technology for effective information exchange and staying connected with the broader educational community may further enrich their knowledge base.

Lastly, future researchers may conduct in-depth investigations into specific mechanisms and interventions within knowledge management practices that yield the most significant impact on teaching effectiveness. Exploring nuanced aspects such as the role of technology, the effectiveness of collaborative platforms, and the influence of organizational culture on knowledge exchange may provide valuable insights. Additionally, conducting longitudinal studies to assess the sustained effects of knowledge management initiatives on teaching outcomes over time may contribute to a more comprehensive understanding. Moreover, considering variations across different educational contexts, levels, and subjects may offer a nuanced view of the generalizability of findings.

References

- [1] J. Schweig, "Measuring teacher effectiveness." <https://www.rand.org/education-and-labor/projects/measuring-teacher-effectiveness/measuring-teacher-effectiveness.html>, 2023.
- [2] P. Mupa, & T. I Chinooneka, "Factors contributing to ineffective teaching and learning in primary schools: Why are schools in decadence?" *Journal of Education and Practice*, 6(19), 125-128, 2015.
- [3] B. M. Ansley, J. Meyers, K. McPee & K. Varjas, "The hidden threat of teacher stress." https://www.salon.com/2018/03/11/the-hidden-threat-of-teacher-stress_partner/, 2018.
- [4] J. C. Ansis, "Filipinos cite job, studies as top cause of stress — CNN PH poll. CNN Philippines." <http://cnnphilippines.com/lifestyle/2015/09/23/Filipinos-top-causes-of-stress-jobtraffic-money.html>, 2017.
- [5] N. A. Ermitanio, "Work-related stress affects one's life, dealing with it essential." *Philippine Daily Inquirer*. <https://business.inquirer.net/195891/work-related-stress-affects-ones-life-dealing-with-it-essential>, 2015.
- [6] E. Eisner, "Alternative approaches to curriculum development in art education." *Studies in Art Education*, Vol. 25, No. 4 (Summer, 1984), pp. 259-264, 1979.
- [7] U. Cantner & K. Joel, "Functional chains of knowledge management. Effects on firms' innovative performance." *European Journal of Economic and Social Systems*, Lavoisier, vol. 20(2), pages 211-230, 2007.
- [8] J. Swan, S. Newell, & M. Robertson, "Central agencies in the diffusion and design of technology: a comparison of the UK and Sweden", *Organization Studies*, 1999.
- [9] T. H. Davenport, D. W. DeLong & M. C. Beers, "Successful Knowledge Management Projects". *Sloan Management Review*, Vol. 39, No. 2, 1998
- [10] J. Rowley, "What is knowledge management?", *Library Management*, Vol. 20 No. 8, pp. 416-420. <https://doi.org/10.1108/01435129910291175>, 1999.
- [11] V. Hlupic, N. Pouloudi & G. Rzevski, "Towards an integrated approach to knowledge management: 'hard', 'soft' and 'abstract' issues." *Knowledge and Process Management* 9(2):90 – 102, 2002.
- [12] S. Abu Naser, M. J. Al Shobaki & Y. M. Abu Amuna, "Knowledge management maturity in universities and its impact on performance excellence Comparative study." *Journal of Scientific and Engineering Research*, 2016, 3(4), 2016.
- [13] A. N. Zaied, "An integrated knowledge management capabilities framework for assessing organizational performance." *I.J. Information Technology and Computer Science*, 2012, 2, 1-10, (2012)
- [14] S. Supermane & L. M. Tahir, "An overview of knowledge management practice among teachers", *Global Knowledge, Memory and Communication*, Vol. 67 No. 8/9, pp. 616- 631, 2018.

- [15] K. W. Chu, "Implementing knowledge management in school environment: A principal's leadership driven approach", Doctoral Dissertation, The University of Hong Kong, Hong Kong, 2013.
- [16] L. A. Petrides, & T. R. Nodine, "Knowledge management in education: Defining the landscape,," *The Institute for the Study of Knowledge Management in Education, Half Moon Bay, California, USA*, 2003.
- [17] R. Korrapati, "Five chapter model for research thesis writing." <http://repository.unej.ac.id/>, 2016.
- [18] S. Kabir, "Methods of data collection." https://www.researchgate.net/publication/325528948_Methods_of_Data_Collection, 2016
- [19] J. Hair, M. Sarstedt, C. M. Ringle, & S. P. Gudergan. *Advanced issues in partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks: Sage, 2018.
- [20] Knowledge Management Assessment Tool, "Knowledge management assessment tool: Developed jointly by Arthur Andersen and The American Productivity and Quality Center." Chicago, IL, 1997.
- [21] M. Nazir, A. AL-Ansari, K. Alkhalifa, B. Gffar, & J. Alhumaid, "Use of student evaluation of teaching (SET) survey to evaluate effectiveness of teaching in a leadership course among dental students over three years." <https://downloads.hindawi.com/journals/tswj/2020/6436102.pdf>, 2020.
- [22] R. Rahim, M. Ong, L. Wahab & N. Anwar, "Knowledge management strategies and green innovation practices." <https://doi.org/10.31580/apss.v1i1i.2822>, 2023.
- [23] D. Lehman, "Organizational cultural theory and research administration knowledge management." <https://www.srainternational.org/blogs/martha-jack/2018/01/25/organizational-cultural-theory-and-research-admini>, 2018.
- [24] E. Grimsdottir & I. Edvardsson, "Knowledge management, knowledge creation, and open innovation." <https://journals.sagepub.com/doi/full/10.1177/2158244018807320>, 2018.
- [25] R. Sword, "Effective communication in the classroom: Skills for teachers." <https://www.highspeedtraining.co.uk/hub/communication-skills-for-teachers/>, 2020.
- [26] H. Rashid, "The effects of teacher expectations on student achievement." <https://limbd.org/the-effects-of-teacher-expectations-on-student-achievement/>, 2023.
- [27] C. Weinstein, & N. Schafer, "Classroom management." <https://www.oxfordbibliographies.com/display/document/obo-9780199756810/obo-9780199756810-0155.xml>, 2021.
- [28] N. Abbas, "Importance of knowledge management at Mauritius Institution of Education." <https://academicjournals.org/journal/IJEAPS/article-full-text/DF86D7D66803>, 2017.
- [29] M. Kalman, (2020). School improvement and contextual factors: A qualitative case study on Educators' Perceptions and Experiences. *Pedagogical Research*, 5(4), em0083. <https://doi.org/10.29333/pr/9134>, 2020.
- [30] A. Alvarenga, F. Matos, R. Godina & J. Matias, "Digital transformation and knowledge management in the public sector." <https://www.mdpi.com/2071-1050/12/14/5824>, 2020.
- [31] A. Haque, X. Zhang, N. Hasan, M. Islam, A. Saha, I. Hossain, Z. Rahman, "Knowledge sharing among students in social media." <https://www.mdpi.com/2071-1050/15/13/9983>, 2023.