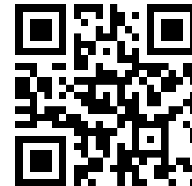


Total Quality Management School Practices, Implementation of ISO 9001: 2015 Quality Management System and Performance of Schools in the Division of Santa Rosa City, Laguna



May B. Basbas, LPT PhD

Celina Plains Subdivision Barangay Poo, Santa Rosa City, Laguna, Philippines 4026

ABSTRACT: The study aimed at determining the total quality management school practices, level of implementation of ISO 9001: 2015 quality management system and level of performance of schools in the Division of Santa Rosa City, Laguna. Descriptive-correlational research method was employed using self-made survey questionnaire. The study revealed that the respondents strongly agreed on the total quality management school practices with an overall weighted mean of 3.50. Similarly, the level of implementation of ISO 9001: 2015 quality management system was very high with an overall weighted mean of 3.48 and the level of performance of schools was very high with an overall average of 3.53. The relationship ranged from moderate to high correlation with a probability value of 0.000 for all variables at 0.01 level of significance revealed a significant relationship between the total quality management school practices and level of implementation of ISO 9001: 2015 quality management system, between the total quality management school practices and level of performance of schools, between level of implementation of ISO 9001: 2015 quality management system and level of performance of schools. From the salient findings, it is imperative to conclude that the schools in the division of Santa Rosa City focus on school practices that would instill commitment to the learning success of the students visible in a very high learning and teaching processes with the support of school resources and external engagement. Recognizing the value of implementing ISO 9001: 2015 quality management system for the improvement of the school operations gives significant impact both in the micro or macro level of school management, thus improves the performance of school heartened on a learner-centered, inclusive and inspiring learning environment.

KEYWORDS: Descriptive correlational research, Total Quality Management, Quality Management System, Performance.

INTRODUCTION

Total Quality Management (TQM) has a great contribution in forming the education system, adapting to it would make important changes not only in the school operations but also in the dispense of quality education among learners, and has vital superiorities in development of education system can meet the expectations of the stakeholders.

The concept of Total Quality Management (TQM) is considered as one of a popular concept which is used to manage the quality of product and services comprehensively (Permana et al., 2021). Likewise, it is a structured effort by employees to continuously improve the quality of their products and services through proper feedbacks and research, thus ensuring superior quality of a product or service is not the responsibility of a single member (Juneja, 2021). Goetsch and Davis (2016) as cited in Pambreni (2019) posited that total quality in reference with quality assurance is an approach to doing business that endeavors to maximize the competitiveness of an organization through the continuous improvement of the quality of its products, services, people, processes, and environments.

Moreover, TQM raises the entire process of encouraging everyone in the organization to participate in attempts to improve or enhance the quality of the organizational operations. Likewise, it is the management of initiatives and procedures which aims to achieve quality products and services. It includes key principles such as executive management, training, customer focus, decision making, continuous improvement, organization culture, and employee involvement (Murray, 2019). With the said perspective, TQM as mentioned by Sallis (2019) is undeniably considered as a concept of continuous improvement that may equip every educational institution with a set of practical tools for addressing the requirements, wants and expectations of the stakeholders.

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Educational institutions benefit from the ISO 9001 Certificate to the fullest extent possible. The Institutions' ISO 9001: 2015 Quality Management Systems aims for retrospective archiving, more regularity, and a comprehensive understanding of the operations done. By adopting an approach that begins to use more efficient work procedures and focuses on the organization's business goals, ISO 9001 standards will assist employees and boost customer satisfaction (Celik, 2018).

As comprehensively assumed by most organizations, Quality Management System must usually align all aspects of the delivery of the company's value proposition including procedural aspect and strategic objectives through its policies, operational procedures, leadership and motivational methods, resource allocation, and distribution of information. In linking to the educational practice, Quality Management System contributes to the overall system of quality processes of the educational organizations (Gordon, 2021). Thus, it forms an integral part of the current socio-economic and environmental challenges, quality standards which ought to be dynamic and flexible so as to cater for the different stakeholders of the educational institutions (Kounis, 2018).

Furthermore, QMS (Quality Management System) is as useful as it can be for it serves as a coherent framework for systematically integrating, aligning and focusing organizational processes. In connecting the above-mentioned principle in the educational set up, it guides the educational institutions to focus on processes that would help the schools in accomplishing its network of objectives and infrastructure of goals effectively and efficiently for the value and adeptness of processes that ensure maximization of shareholders' satisfaction. Such a scope of QMS has intriguing implications on the structure of the educational institutions considering its culture, knowledge management practices and climate.

Silva et al., (2021) posited that the organizations could follow the suggested pathway to evolve their QMS to support solutions to some of the current challenges. At the same time, quality managers could reflect on their future professional challenges. This work has taken a step forward, indicating sustainable quality management systems as a viable pathway to explore QM knowledge regarding the emergency paradigm, thus enhancing leadership's role (Silva, et al., 2021).

Consequently, an empirical research confirms that, in accordance with its conformance purpose, ISO 9001 is successful in building conformance capability and that by using ISO 9001 practices companies can also benefit in relation to production economics through improved process efficiency, and also to other competitive capabilities. On the other hand practitioners cannot expect ISO to improve the level of product quality, and consecutively provide associated customer satisfaction and continuous improvement. Improving the level of product quality is not within the scope of ISO 9001; instead it has to be determined within the process of developing business strategy (Rusjan & Castka, 2021).

In view of this, the Department of Education (DepEd) issued DO 009 s.2021 or called Institutionalization of a Quality Management System in the Department of Education which aims to provide offices of DepEd and schools with guidelines and standards to integrate DepEd internal systems and processes, upgrade people capacity, ensure consistency in the delivery of quality services, and foster continuous improvement that will result in enhanced and sustained client satisfaction. The department saw the benefits on establishing a QMS certifiable to ISO standards which includes improvement of quality of service through streamlining and standardization of processes and reduction of variability in implementation, increase on productivity and efficiency through clarity in processes and process holders, strengthened accountability through transparent communication within and among offices and personnel in the organization and its external stakeholders, enhancement of client satisfaction through improvement of the organization's ability to fully understand and consistently meet client requirements, and continuous performance excellence through institutionalization of continuous improvement as a core value and practice of the Department. The establishment of DepEd National Quality Management System (QMS) wherein the respective QMS of DepEd offices and schools are established, implemented, and aligned in accordance with standards in these guidelines aimed at integrating DepEd's internal process within and across governance levels to ensure consistency in the delivery of quality services to achieve client satisfaction (DepEd Circular, 2016).

Nonetheless, despite the number of studies that investigated particularly on knowledge and adherence to total quality management, ISO standards and Quality Management System in selected public secondary schools in the country, no study yet has been conducted in the schools in the division of Santa Rosa City, Laguna concerning total quality management school practices, implementation of ISO 9001: 2015 quality management system and performance of schools.

Thus, the study is valued for it would help the schools in the division of Santa Rosa City, Laguna particularly the school heads to identify skills deficiencies among the members of the teaching force which can easily be addressed through the conduct of the necessary training activities and implementation of comprehensive educational programs and reforms. With emphasis on collaboration, this can serve as a guide for the schools in the division of Santa Rosa City, Laguna in the creation of the cross-functional academic teams and knowledge sharing mechanisms that would indeed contribute to the attainment of quality education needed in today's learning continuum and for the improvement of the school operations as a whole. From the

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above-mentioned viewpoints, the researcher underscored that Total Quality Management school practices and implementation of ISO 9001: 2015 Quality Management System could be the antecedents of the performance of selected schools in the city divisions of Laguna province.

METHODS

The study used descriptive-correlational research method since it determined the total quality management school practices, implementation of ISO 9001: 2015 quality management system and level of performance of schools in the Division of Santa Rosa City, Laguna for the Academic Year 2021-2022. Likewise, it sought significant relationships that exist among variables and it measured the strength and level of such correlation. The primary data used in the study was randomly selected from Teachers I-III and Master Teachers of ten (10) public secondary schools in the division of Santa Rosa city, Laguna. The sample size was taken using the Slovin's formula with 5% margin of error resulting to 263 out of 767 Teachers I-III and 27 Master Teachers with a total of 290 respondents from 794 total population.

The researcher used three sets of self-made survey questionnaire. The survey questionnaire was validated using the Cronbach's reliability test. The first set contained statements to determine total quality management school practices which was measured using the Likert-Typed Scale (4-Strongly Agree, 3-Agree, 2-Disagree, 1- Strongly Disagree). The second set of survey questionnaire included statements to determine the level of implementation of ISO 9001: 2015 quality management system which was measured using the Likert-Typed Scale (4-Strongly Agree/Very high, 3-Agree/High, 2-Disagree/ Low, 1- Strongly Disagree/Very Low). The third set composed of statements to determine the level performance of schools in terms access, quality and governance using the Likert-Typed Scale (4-Strongly Agree/Very high, 3-Agree/High, 2-Disagree/ Low, 1- Strongly Disagree/Very Low).

Following the ethical principles of the study, the researcher secured a letter of request asking approval from the Schools Division Superintendent of Santa Rosa City for the conduct of the study. Upon received of an endorsement and approval letter, the researcher sought the approval of to the concerned school heads of the selected schools. The questionnaire was administered by the researcher to the respondents of the study following the safety protocols to adhere to the health standards set by the Inter-agency Task Force (IATF) related to the COVID - 19 pandemic. The researcher explained to the respondents about the nature of their participation in the investigation and discussed with them the instructions to follow for easy and convenient ways of answering the survey forms. The respondents were assured that the information that they would provide with the researcher would be treated with confidentiality as part of the ethical considerations of the study. Individual consent of the respondent was obtained explaining to them that this investigation was simply an academic requirement and would be kept with utmost privacy. The accomplished questionnaires were collected right after they had answered by the respondents and the gathered data were tallied, tabulated, analyzed and interpreted. Pearson -r was used to ascertain the relationship between variables while weighted mean and ranking were used to determine the total quality management school practices, level of implementation of ISO 9001:2015 Quality Management System and the level of performance of schools.

RESULTS AND DISCUSSIONS

Discussion of the total quality management school practices, ISO 9001:2015 quality management system, and performance of schools is presented in the succeeding tables:

Table 1. Composite Table for the Total Quality Management School

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Service to customer	3.49	Strongly Agree	6.5
2. Leadership	3.47	Strongly Agree	9
3. Physical environment and resources	3.52	Strongly Agree	3.5
4. Effective learning and teaching	3.54	Strongly Agree	1
5. Students	3.49	Strongly Agree	6.5
6. Staff	3.44	Strongly Agree	8
7. External relations	3.52	Strongly Agree	3.5
8. Organizations	3.53	Strongly Agree	2
9. Standards	3.51	Strongly Agree	5
Overall Weighted Mean	3.50	Strongly Agree	

Legend: 3.25-4.00- Strongly Agree (4), 2.5-3.24 Agree (3), 1.75-2.49 Disagree (2) 1.00- 1.74 Strongly Disagree (1)

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It is shown in table 1 that the respondents strongly agreed on the total quality management school practices as evidenced by overall weighted mean of 3.50 in all practices revealed that the schools in the Division of Santa Rosa City improved learners' academic competence through enhancement of the learning and teaching processes which in turn may help the teachers develop their pedagogical skills. In addition, an effective management of resources and external supports. Kistian and Permana (2019), theorized that Total quality management is the management of initiatives and procedures which aims to achieve quality products and services through leadership and physical environment and resources of the organization. It includes key principles such as executive management, training, customer focus, decision making, continuous improvement, organization culture, and external relations (Murray, 2019).

Paragas (2020) made a descriptive study which determined and analyzed the total quality management practices of public secondary school heads. The study included the school heads and teachers in all Schools Division in Pangasinan. The identified quality management practices are based on the parameters of APPES Manual. Findings of the study revealed that stakeholders were truly a great agent in improving the public secondary schools. Therefore, school heads must be eager to do this to have a strong partnership and participation of the stakeholders in the school.

On the other hand, Suleman (2017) revealed that public secondary schools encountered a lot of obstacles in implementing TQM. Poor and ineffective leadership; a lack of proper physical environment and resources; workforce insubordination; a lack of management commitment; poor and ineffective planning; poor teacher morale; political interference and external relations; poor PTA performance; poor infrastructural facilities; a lack of competent teaching staff; an unstable curriculum; an unfavorable school environment; and a lack of textbooks and instructional materials were among the challenges. TQM has unquestionably great promise in the field of education. It should not be assumed that there will be no difficulties or roadblocks in implementing TQM in education. However, in terms of service to customer, the schools in the Division of Santa Rosa City made appropriate strategies like creating different platforms to guarantee that information reach the customers on time. Establishing a pro-active leadership results a sense of ownership among personnel that leads to become more socially responsible and accountable in every decision they make in all levels of organization and carried out well a continuous improvement in the quality of education services and labor processes to ensure the attainment of the expected standards.

Table 2. Composite Table for the Level of Implementation of ISO 9001: 2015 Quality Management System of Schools

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Leadership	3.48	Very High	4.5
2. Engagement of people	3.50	Very High	1.5
3. Improvement	3.46	Very High	7
4. Customer focus	3.49	Very High	3
5. Process approach	3.47	Very High	6
6. Evidenced-based decision making	3.48	Very High	4.5
7. Relationship engagement	3.50	Very High	1.5
Overall Weighted Mean	3.48	Very High	

Legend: 3.25-4.00- Strongly Agree/Very High (4), 2.5-3.24 Agree/High (3)

1.75-2.49 Disagree/low (2), 1.00- 1.74 Strongly Disagree/Very Low (1)

From the data shown in table 2, an average weighted mean of 3.48 revealed that the level of implementation of ISO 9001: 2015 quality management system of schools in the division of Santa Rosa city, Laguna was very high. Nabaho et al., (2020) stated in their study the overall impact of implementation of ISO on various business performance factors. These performance factors include information quality, operating performance, design performance, environmental performance, product and service quality, supplier and customer focus, relationship engagement, process approach and competitive priorities.

Nabaho et al., (2020) stated in their study the overall impact of implementation of ISO on various business performance factors. These performance factors include information quality, operating performance, design performance, environmental performance, product and service quality, supplier and customer focus, relationship engagement, process approach and competitive priorities. This is obviously implied that the schools' objectives for refining its products or services, processes, structures and management system using the results of the analysis and evaluation of its performance were well defined and the people were empowered to join in and contribute to the fruitful attainment of school initiatives.

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Rusjan and Castka (2021), which postulated that, in accordance with its conformance purpose, ISO 9001 is successful in building conformance capability and that by using ISO 9001 practices companies can also benefit in relation to production economics through improved process efficiency, people engagement, customer focus and also to other competitive capabilities. On the other hand, practitioners cannot expect ISO to improve the level of product quality, and consecutively provide associated customer satisfaction and continuous improvement. Improving the level of product quality is not within the scope of ISO 9001; instead, it has to be determined within the process of developing business strategy.

Kenya Seed Company has adopted organizational practices in line with ISO 9000:2008. The study analyzed the effect of ISO 9000:2008 certification practices of leadership, continual process improvement, people involvement, customer focus and mutual beneficial supplier relationship on operational performance of Kenya Seed Company, Kenya. The objective of the study was to determine the effect of these practices on operational performance. A conclusion came up with a need for the company to assess the company's engagement with suppliers. This means that the schools in the Division of Santa Rosa City, Laguna, recognized their institutional allies for the support extended to them hence, invited concerned parties that could help achieve the institutional objectives and a well-communicated mission and vision to the entire school community for the employees to internalize the very essence of the organization's existence.

Table 3. The Level of Performance of Schools in the Division of Santa Rosa City, Laguna

Indicators	Weighted Mean	Verbal Interpretation	Rank
Access			
1. establishes enrolment processes in school to ensure that all-aged learners are included in quality basic education.	3.61	Very High	1
2. uses an accurate and reliable computer-based enrolment system that updates learners' information data to ensure consistency in registration of learners.	3.53	Very High	5
3. prepares safe learning environment conducive for learning and development of learners.	3.59	Very High	2
4. strengthens community participation in all processes and activities.	3.58	Very High	3
5. implements intervention initiatives that help improve students' retention rate .	3.55	Very High	4
Average	3.57	Very High	
Quality			
1. provides technical assistance on instruction consistent to teaching standards and pedagogies to improve practice and performance.	3.55	Very High	2
2. institutionalizes integration of career awareness and opportunities into the school curriculum and other learning experiences.	3.50	High	5
3. initiates on the innovative use of learning assessment tools and strategies consistent with curriculum requirements.	3.52	Very High	3
4. contextualizes learning standards to effectively assist teachers in making the curriculum relevant for learners.	3.51	Very High	4
5. promotes a learner-centered, inclusive and motivating learning environment .	3.56	Very High	1
Average	3.53	Very High	
Governance			
1. implements the school developmental plans that reflect institutions' goals and objectives.	3.53	Very High	1

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2.promotes a culture of research to produce data driven and evidence-based innovations to improve school performance and foster continuous improvement.	3.47	Very High	4.5
3.establishes a culture of transparency in the delivery of basic education services such as allocation, procurement and disbursement.	3.49	Very High	3
4.creates collaborative actions with stakeholders in solving complex issues on learner development and evolving needs of school.	3.50	Very High	2
5.empowers school personnel in designing and implementing needs-based programs in the school that support the development of learners.	3.47	Very High	4.5
Average	3.49	Very High	
Overall Weighted Mean	3.53	Very High	

Legend: 3.25-4.00- Strongly Agree (4), 2.5-3.24 Agree (3), 1.75-2.49 Disagree (2)
1.00- 1.74 Strongly Disagree (1)

From the data shown, the level of performance of schools in the Division of Santa Rosa City in has a weighted mean of 3.75 for access, 3.53 for quality and 3.49 for governance with an overall weighted mean of 3.53. The overall weighted mean of 3.53 revealed a very high level of implementation in terms of access, quality and governance.

Liniao & Gosadan (2019) aimed to find out if the school-based management system level of implementation significantly influences the school performance. Most of the administrators’ school performance was meeting the standards in the NAT average rating. School-based management system level of implementation in terms of leadership and governance, curriculum and instruction, accountability, and continuous improvement and management of resources significantly influence school performance. All of these indicators are the best significant predictors of school performance. These results further indicate that the higher is the administrators’ level of implementation on leadership and governance, curriculum and instruction, accountability and continuous improvement, and management of resources, the higher is the level of school performance. The developed enrolment processes in school heartened a learner-centered, inclusive and inspiring learning environment , and implemented the school developmental plans that reflected institutions’ goals and objectives.

Msallam et.al (2020), suggested a higher management focus on deepening and increasing awareness of total quality management among university college administrative leaders and employees by incorporating them into training programs, workshops, conferences, and seminars, as well as informing them of successful international university experiences in the field of total quality management. Moreover, school performance is measured through the level of School – based management. SBM practices related to school leadership, the school improvement process, and school performance accountability were discovered to be linked to school leadership and staff development.

Table 4. Relationship between Total Quality Management School Practices and Level of Implementation of ISO 9001: 2015 Quality Management System of Schools in the Division of Santa Rosa City, Laguna

TQM School Practices	Level of Implementation of ISO 9001: 2015 Quality Management System						
	Leadership	Engagement of people	Improvement	Customer focus	Process approach	Evidencebased decision making	Relationship engagement
Service to customer	r=0.700** Moderate correlation p=0.000	r=0.698** Moderate correlation p=0.000	r=0.669** Moderate correlation p=0.000	r=0.732** Moderate correlation p=0.000	r=0.702** Moderate correlation p=0.000	r=0.706** Moderate correlation p=0.000	r=0.727** Moderate correlation p=0.000

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Leadership	r=0.747** Moderate correlation p=0.000	r=0.729** Moderate correlation p=0.000	r=0.734** Moderate correlation p=0.000	r=0.742** Moderate correlation p=0.000	r=0.734** Moderate correlation p=0.000	r=0.745** Moderate correlation p=0.000	r=0.713** Moderate correlation p=0.000
Physical environment and resources	r=0.715** Moderate correlation p=0.000	r=0.722** Moderate correlation p=0.000	r=0.738** Moderate correlation p=0.000	r=0.742** Moderate correlation p=0.000	r=0.720** Moderate correlation p=0.000	r=0.699** Moderate correlation p=0.000	r=0.696** Moderate correlation p=0.000
Effective learning and teaching	r=0.753** Moderate correlation p=0.000	r=0.732** Moderate correlation p=0.000	r=0.753** Moderate correlation p=0.000	r=0.763** Moderate correlation p=0.000	r=0.740** Moderate correlation p=0.000	r=0.741** Moderate correlation p=0.000	r=0.727** Moderate correlation p=0.000
Students	r=0.656** Moderate correlation p=0.000	r=0.675** Moderate correlation p=0.000	r=0.664** Moderate correlation p=0.000	r=0.710** Moderate correlation p=0.000	r=0.668** Moderate correlation p=0.000	r=0.668** Moderate correlation p=0.000	r=0.694** Moderate correlation p=0.000
Staff	r=0.700** Moderate correlation p=0.000	r=0.779** Moderate correlation p=0.000	r=0.761** Moderate correlation p=0.000	r=0.761** Moderate correlation p=0.000	r=0.763** Moderate correlation p=0.000	r=0.726** Moderate correlation p=0.000	r=0.722** Moderate correlation p=0.000
External Relations	r=0.752** Moderate correlation p=0.000	r=0.746** Moderate correlation p=0.000	r=0.762** Moderate correlation p=0.000	r=0.801** High correlation p=0.000	r=0.756** Moderate correlation p=0.000	r=0.739** Moderate correlation p=0.000	r=0.778** Moderate correlation p=0.000
Organizations	r=0.806** High correlation p=0.000	r=0.828** High correlation p=0.000	r=0.805** High correlation p=0.000	r=0.823** High correlation p=0.000	r=0.827** High correlation p=0.000	r=0.798** Moderate correlation p=0.000	r=0.798** Moderate correlation p=0.000
Standards	r=0.803** High correlation p=0.000	r=0.803** High correlation p=0.000	r=0.792** Moderate correlation p=0.000	r=0.815** High correlation p=0.000	r=0.823** High correlation p=0.000	r=0.797** Moderate correlation p=0.000	r=0.780** Moderate correlation p=0.000
**Significant @ 0.01							

As shown in table 4, the relationship ranged from moderate to high correlation with a probability value of 0.000 for all variables which were lower than the significance level at 0.01. The result revealed a significant relationship between the total quality management school practices and level of implementation of ISO 9001: 2015 quality management system of schools in the Division of Santa Rosa City, Laguna. The results showed that more total quality management school practices, the higher is the level of implementation of ISO 9001: 2015 quality management system of schools in the division of Santa Rosa City, Laguna. The findings support the study made by Sadikoglu & Olcay (2017) which explained the impacts of TQM practices on various performance measures as well as the reasons and the barriers of the TQM practices of firms. This shown that different TQM practices significantly affect different implementation and performance outcomes. Results revealed that primary obstacles that

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the firms face were lack of employee involvement, awareness and commitment of the employees, inappropriate firm structure, and lack of the resources.

Table 5. Relationship between the Total Quality Management School Practices and Level of Performance of Schools in the Division of Santa Rosa City, Laguna

TQM School Practices	Level of Performance of School		
	Access	Quality	Governance
Service to customer	r=0.699** Moderate correlation p=0.000	r=0.710** Moderate correlation p=0.000	r=0.688** Moderate correlation p=0.000
Leadership	r=0.683** Moderate correlation p=0.000	r=0.725** Moderate correlation p=0.000	r=0.731** Moderate correlation p=0.000
Physical environment and resources	r=0.720** Moderate correlation p=0.000	r=0.715** Moderate correlation p=0.000	r=0.673** Moderate correlation p=0.000
Effective learning and teaching	r=0.776** Moderate correlation p=0.000	r=0.758** Moderate correlation p=0.000	r=0.752** Moderate correlation p=0.000
Students	r=0.675** Moderate correlation p=0.000	r=0.733** Moderate correlation p=0.000	r=0.692** Moderate correlation p=0.000
Staff	r=0.710** Moderate correlation p=0.000	r=0.704** Moderate correlation p=0.000	r=0.729** Moderate correlation p=0.000
External relations	r=0.758** Moderate correlation p=0.000	r=0.757** Moderate correlation p=0.000	r=0.762** Moderate correlation p=0.000
Organizations	r=0.801** High correlation p=0.000	r=0.805** High correlation p=0.000	r=0.782** Moderate correlation p=0.000
Standards	r=0.792** Moderate correlation p=0.000	r=0.791** Moderate correlation p=0.000	r=0.783** Moderate correlation p=0.000
**Significant @ 0.01			

As shown in table 5, there was a significant relationship between the total quality management school practices and level of performance of schools in the division of Santa Rosa City, Laguna since the relationship ranged from moderate to high correlation with a probability value of 0.000 for all variables which were all lower than the significance level at 0.01. This means that the more total quality management school practices, the higher is the level of performance of schools in the division of Santa Rosa City, Laguna.

The findings support the study of Pambreni et al. (2019) mentioned in their study that the effect of total quality management (TQM) practices on the organization performance of Small and Medium Enterprises of four critical elements of TQM namely customer focus, continuous improvement, strategically based, and total employee involvement are used as an important factor influencing on organization performance. The research finding indicate that TQM elements; namely customer focus, continuous improvement, strategically based, and total employee involvement have a positive and significant effects on organization performance.

Lushi et al. (2017), which posited that Quality management systems (QMs) are business practices that may benefit various companies. As several empirical studies show, implementing QM effectively influences firm performance positively. Firms that implement QM focus on providing more value for their customers or stakeholders and improving the efficiency of processes. In this context, management system standards (MSSs) have enjoyed enormous success over the years, in the sphere of QM (ISO

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9001). This means that the quality and the satisfaction of the employees for increasing productivity, their motivation and rewarding, the use of performance evaluation and performance measurement techniques, elimination of errors and mistakes in the organization, concentrating on teamwork, benefitting from the experience of successful organizations, making the strategic planning and such like targets underline at the sense of Total Quality Management (TQM).

Table 6. Relationship between the Level of Implementation of ISO 9001: 2015 Quality Management System and Level of Performance of Schools in the Division of Santa Rosa City, Laguna

Level of Implementation of ISO 9001: 2015 Quality Management System	Level of Performance of School		
	Access	Quality	Governance
Leadership	r=0.815** High correlation p=0.000	r=0.821** High correlation p=0.000	r=0.856** High correlation p=0.000
Engagement of people	r=0.835** High correlation p=0.000	r=0.797** Moderate correlation p=0.000	r=0.808** High correlation p=0.000
Improvement	r=0.802** High correlation p=0.000	r=0.812** High correlation p=0.000	r=0.853** High correlation p=0.000
Customer focus	r=0.826** High correlation p=0.000	r=0.821** High correlation p=0.000	r=0.859** High correlation p=0.000
Process approach	r=0.801** High correlation p=0.000	r=0.845** High correlation p=0.000	r=0.849** High correlation p=0.000
Evidenced-based decision making	r=0.829** High correlation p=0.000	r=0.846** High correlation p=0.000	r=0.860** High correlation p=0.000
Relationship engagement	r=0.808** High correlation p=0.000	r=0.851** High correlation p=0.000	r=0.817** High correlation p=0.000
**Significant @ 0.01			

As shown in table 6, the relationship ranged from moderate to high correlation with a probability value of 0.000 for all variables which were all lower than the significant level of 0.01 which revealed that there was a significant relationship between the level of implementation of ISO 9001: 2015 quality management system and level of performance of schools in the division of Santa Rosa City, Laguna. The results imply that higher the level of implementation of ISO 9001: 2015 quality management system, the higher the level of performance of schools in the division of Santa Rosa City, Laguna.

The findings support the study made by Bhatia (2018), which explicated that a number of organizations have implemented Quality Management Systems (QMS) to create a culture of continuous quality improvement and improve business performance. These standards cover aspects such as management leadership, process management, teamwork, quality improvement, and supplier and customer relations. He found out the impact of implementation of QMS on various business performance factors which include information quality, operating performance, design performance, environmental performance, product and service quality, supplier and customer relationships and competitive priorities. The assessment of Figueroa (2020) on the returns of the Quality Management System (QMS) in relation to Capitol University's quest for excellence covering School Year 2005-2009 revealed that this university's QMS has constantly implemented and maintained management responsibility; has at all times implemented and maintained its human resource quality management; and that QMS has often achieved its product realization. Implementation and constant monitoring of QMS find satisfaction in the university's employees.

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CONCLUSION

The schools in the division of Santa Rosa City, Laguna recognized the value of total quality management school practices and effective implementation of ISO 9001: 2015 quality management system. High level of school performance is dependent on the number total quality management practices and the level of implementation of quality management system. Teachers looked at all these practices and implementation as essential in its mission of towards the achievement of vision. Moreover, the developed pedagogical skills among teachers helped improve the learning and teaching processes to achieve a very high level of high academic competence for the students in response to the target quality basic education, heartened a learnercentered, inclusive and inspiring learning environment, and implemented the school developmental plans that reflected institutions' goals and objectives.

RECOMMENDATION

The study has some limitations particularly on the sample size since the respondents covered only teachers 1-3 and master teachers of the division of Santa Rosa during the Academic year 2021-2022 and the use of quantitative method of research. For a more comprehensive result, it is recommended for future researchers to replicate the study using a qualitative method of research presentation including head teachers as participants. to understand deeply the teachers' context of practices and implementation in their respective schools. Moreover, the city schools should prepare a contingency plan in the event that the level of implementation and practices fall below the high level of implementation and adapting agreeable school programs with stakeholders to sustain external and relationship engagement such as parents working with their children to develop learning skills, teachers collaborate with co-workers, and LGUs support in school programs. This would also ensure that services rendered are based on customer satisfaction.

REFERENCES

- 1) Angelos Pantouvakis & Maria Karakasnaki (2017) Role of the human talent in total quality management–performance relationship: an investigation in the transport sector, Total Quality Management & Business Excellence
- 2) Ahmed, W. (2017). ISO 9001 Transition and its Impact on the Organizational Performance: Evidence from Service Industries of Pakistan. <https://www.ijrbm.org/papers/v4-i3/4.pdf>
- 3) Ahmudi, B. & Handayani, N. (2018). Effectiveness analysis of ISO 9001:2015 implementation at manufacturing industry. https://www.shs-conferences.org/articles/shsconf/pdf/2018/10/shsconf_ices2018_01008.pdf
- 4) Assignment Point (2021). Research paper on Total Quality Management (TQM). <https://www.assignmentpoint.com/business/management/research-paper-on-total-qualitymanagement-tqm.html>
- 5) Baba, S. & Ganie, S. (2019). Total Quality Management in Academic Perspective: An Overview. <https://digitalcommons.unl.edu/libphilprac/3007/>
- 6) Bhaita, M. (2018). Assessing the Impact of Quality Management Systems on Business Performance. <https://spectrum.library.concordia.ca/id/eprint/978016/>
- 7) Bester field, D., et al. (2018). Total Quality Management. [http://www.uop.edu.pk/owecontents/Total%20Quality%20Management%20by%20Dale%20H.%20Besterfield,%20Caro%20Besterfield-Michna,%20Glen%20H.%20Besterfield,%20Mary%20BesterfieldSacre,%20Hemant%20Urduwarshe,%20Rashmi%20Urduwarshe%20\(z-lib.org\).pdf](http://www.uop.edu.pk/owecontents/Total%20Quality%20Management%20by%20Dale%20H.%20Besterfield,%20Caro%20Besterfield-Michna,%20Glen%20H.%20Besterfield,%20Mary%20BesterfieldSacre,%20Hemant%20Urduwarshe,%20Rashmi%20Urduwarshe%20(z-lib.org).pdf)
- 8) Blanco, K., et al. (2019). Interrelation of Senior High School Academic Performance and College Basic Accounting Performance: A Case of First Year Bachelor of Science in Accountancy Students of University of Batangas. *Interdisciplinary Research Journal*, 11(1). Retrieved from <http://ejournals.ph/form/cite.php?id=16343>
- 9) Bunglawa, A. & Asthana, N. (2016). Increasing Service Quality in Education: Views of Principals and Teachers. <https://www.ejmste.com/download/increasing-service-qualityin-education-views-of-principals-and-teachers-4913.pdf>
- 10) Calla, A. B.. (2018). Total Quality Management of Notre Dame Educational Association Higher Education Institutions. *PAGE CODGE REGION XI (Multidisciplinary Research)*, 1(1). Retrieved from <http://ejournals.ph/form/cite.php?id=14456>
- 11) Cetinderea, et. al, (2019), The effects of total quality management on the business performance: An application in the province of Kütahya. <https://www.sciencedirect.com/science/article/pii/S2212567115003664>
- 12) Celik, B. (2018). What is the Contribution of ISO 9001 Quality Management System to Educational Institutions?. https://www.researchgate.net/profile/BunyaminCelik/publication/334246172_What_is_the_Contribution_of_ISO_9001_Quality_Management_System_to_Educational_Institutions/links/5e56f29b4585152ce8f27c96/What-isthe-Contribution-of-ISO-9001-Quality-Management-System-to-EducationalInstitutions.pdf

Total Quality Management School Practices, Implementation of ISO 9001: 2015 Quality Management System and Performance of Schools in the Division of Santa Rosa City, Laguna

- 13) Crosby (2017) Total Quality Management (TQM) <http://asq.org/learn-about-quality/total-quality-management/overview/overview.html>
- 14) De Leon, P. C. (2017). Sustaining Tqm In An Iso 9001:2008 – Certified Philippine Lgu: The Case Of Calapan City. <http://ejournals.ph/form/cite.php?id=16302>
- 15) DepEd Memo (2021). Institutionalization of a Quality Management System in the Department of Education. <https://www.deped.gov.ph/2021/02/24/february-24-2021-do009-s-2021-institutionalization-of-a-quality-management-system-in-the-department-ofeducation/>
- 16) Domingues, P., et al. (2019). The added value of the ISO 9001:2015 international standard from an auditors' perspective: A CB-SEM based evaluation. https://www.researchgate.net/publication/337497623_The_added_value_of_the_ISO_9001_2015_international_standard_from_an_auditors'_perspective_A_CBSEM_based_evaluation
- 17) Fabian, G., et al. (2019). The Impact Of Iso Certification Towards Work- Life Balance Of Selected Employees Of Letran-Calamba. Ani: Letran Calamba Research Report2. <http://ejournals.ph/form/cite.php?id=10965>
- 18) Figueroa, E. E.. (2020). Quality Management System: A Strategic Response to Attaining Academic Excellence. <http://ejournals.ph/form/cite.php?id=1586>
- 19) Gordon, J. (2021). Quality Management System (QMS) – Explained. https://thebusinessprofessor.com/en_US/mgmt-operations/quality-management-systemqms-defined
- 20) Gremyr, I., et al. (2021). Increasing the value of quality management systems. <https://www.emerald.com/insight/content/doi/10.1108/IJQSS-10-2020-0170/full/html>
- 21) Hadian, D. (2018). The Development of Quality Management System ISO 9001. <https://researchleap.com/development-quality-management-system-iso-9001/>
- 22) Juneja, P. (2020). Total Quality Management - Meaning and Important Concepts. <https://www.managementstudyguide.com/total-quality-management.htm>
- 23) Khanam, S. (2017), "Role of Information Technology in Total Quality Management: A Literature Review". https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2725096
- 24) Kounis, L. (2018). Quality Management Systems: a Selective Presentation of Case- studies Showcasing Its Evolution. <https://www.intechopen.com/books/6235>
- 25) Kipkorir, C. & Sengwer, A. (2016). Empirical Evidence of ISO 9000:2008 Certification Practices on Operational Performance of KenyaSeed Company. <http://ejournals.ph/form/cite.php?id=12181>
- 26) Kiran, D. R. (2017) Total Quality Management: Key Concepts and Case Studies. <https://www.sciencedirect.com/book/9780128110355/total-quality-management>
- 27) Kristiani, D. & Permana, J. (2019). Proceedings of the 3rd International Conference on Research of Educational Administration and Management (ICREAM 2019). <https://www.atlantis-press.com/proceedings/icream-19/125933738>
- 28) Lantajo, G. (2022). Factors Affecting Total Quality Management among Government Offices during COVID-19 Pandemic. <http://ejournals.ph/form/cite.php?id=16988>
- 29) Linao, R. S. & Gosadan, B. D.. (2019). Meeting our Commitment: School-Based Management System in the lens of School Performance. <http://ejournals.ph/form/cite.php?id=14862>
- 30) Lois, B., et al. (2019). Quality management system for the research process: University of Otavalo, Ecuador. https://www.scielo.sa.cr/scielo.php?pid=S1409-47032019000100571&script=sci_abstract
- 31) Lushi, I., et al. (2016) A Literature Review On ISO 9001 Standards. <https://www.idpublications.org/wp-content/uploads/2016/01/Full-Paper-A-LITERATURE-REVIEW-ON-ISO-9001-STANDARDS.pdf>
- 32) Madan, K. (2017). Public Servant in the Role of a Manager. <https://journals.sagepub.com/doi/abs/10.1177/0019556120060309>
- 33) Manders, B., et al. (2018). ISO 9001 and product innovation: A literature review and research framework. <https://www.sciencedirect.com/science/article/abs/pii/S0166497215000784>
- 34) Mahmood, A. & Ismail, A. (2018). Factors Influencing Academic Performance of Students in Blended and Traditional Domains. <https://onlinejournals.org/index.php/i-jet/article/view/8031>
- 35) Manghani, K. (2017). Quality assurance: Importance of systems and standard operating procedures. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3088954/>
- 36) Martins, Y. & Silva, C. (2018). Risk and ISO 9001: a Systematic Literature Review. https://www.researchgate.net/publication/327161548_Risk_and_ISO_9001_a_Systematic_Literature_Review

Total Quality Management School Practices, Implementation of ISO 9001: 2015 Quality Management System and Performance of Schools in the Division of Santa Rosa City, Laguna

- 37) Mashagba, I. (2017) The Impact Of Total Quality Management (TQM) On The Efficiency Of Academic Performance - Empirical Study - The Higher Education Sector - The University Of Jordan. [https://www.semanticscholar.org/paper/The-Impact-Of-TotalQuality-Management-\(TQM\)-On-The-Mashagba/7c8b210636bb956f0e3bbcc2106685ea48bd9267](https://www.semanticscholar.org/paper/The-Impact-Of-TotalQuality-Management-(TQM)-On-The-Mashagba/7c8b210636bb956f0e3bbcc2106685ea48bd9267)
- 38) Matorera, D. (2017). Quality Management Systems in Education. <https://www.intechopen.com/chapters/58341>
- 39) Moen, R. & Norman, C. (2006). Evolution of the PDCA Cycle. <https://rauterberg.employee.id.tue.nl/lecturenotes/DG000%20DRP-R/references/MoenNorman-2009.pdf>
- 40) Movaheda, M., et al. (2019). A study on effect of performing quality management system on organizational productivity. https://www.researchgate.net/publication/271068409_A_study_on_effect_of_performing_quality_management_system_on_organizational_productivity
- 41) Msallam, A., et al. (2020). The Reality of Achieving the Requirements of Total Quality Management in University Colleges. <http://dstore.alazhar.edu.ps/xmlui/handle/123456789/637>
- 42) Murray, M. (2019). Total Quality Management and Quality Management. <https://www.thebalancesmb.com/total-quality-management-tqm-2221200>
- 43) Nabaho, L., et al. (2020). Quality Assurance of Higher Education Governance and Management: An Exploration of the Minimum Imperative for the Envisioned African Common Higher Education Space. <https://files.eric.ed.gov/fulltext/EJ1279859.pdf>
- 44) Neyestani, B. & Juanzon, J. (2017). ISO 9001 Standard and Organization's Performance: A Literature Review. <file:///C:/Users/HP/Downloads/ijarm2.pdf>.
- 45) Neyestani, B. (2016). Effectiveness of Quality Management System (QMS) on Construction Projects. [file:///C:/Users/HP/Downloads/Effectiveness%20of%20Quality%20Management%20System%20\(QMS\)%20on%20Construction%20Projects.pdf](file:///C:/Users/HP/Downloads/Effectiveness%20of%20Quality%20Management%20System%20(QMS)%20on%20Construction%20Projects.pdf)
- 46) Oduwaiye, R. & Kayode, D. (2017). Total Quality Management And Students' Academic Performance In Ilorin Metropolis Secondary Schools, Nigeria. https://www.Researchgate.Net/Publication/280642581_Total_Quality_Management_And_Students'_Academic_Performance_In_Ilorin_Metropolis_Secondary_Schools_Nigeria
- 47) Oyeniyi, O. (2017). Employees' psychological capital, job satisfaction, insecurity, and intentions to quit: The direct and indirect effects of authentic leadership. <https://psycnet.apa.org/record/2017-06652-004>
- 48) Pamatmat, F. (2016). Total Quality Management and School-Based Management Practices of School Principals: Their Implications to School Leadership and Improvement. https://www.researchgate.net/publication/327665248_Total_Quality_Management_and_School-Based_Management_Practices_of_School_Principals_Their_Implications_to_School_Leadership_and_Improvement
- 49) Pambreni, Y. et al. (2019) The influence of total quality management toward organization performance. https://www.researchgate.net/publication/333187874_The_influence_of_total_quality_management_toward_organization_performance
- 50) Paragas, J. (2020). Quality Management Practices and Performance of Public Secondary School Heads in Pangasinan, Philippines. <http://ejournals.ph/form/cite.php?id=16841>
- 51) Permana, A. et al. (2021). A systematic literature review of Total Quality Management (TQM) implementation in the organization. https://www.researchgate.net/publication/348918996_A_systematic_literature_review_of_Total_Quality_Management_TQM_implementation_in_the_organization
- 52) Peters, T. & Waterman, R. (2017). In Search of Excellence. <https://newlearningonline.com/new-learning/chapter-3/peters-and-waterman-insearch-of-excellence>
- 53) Petkovskam, S. & Gjorgjeska, B. (2018). The significance of the quality management system in making management decisions. https://core.ac.uk/display/35333813?utm_source=pdf&utm_medium=banner&utm_campaign=pdf-decoration-v1
- 54) Pillai, L. & Vallatharai, L. (2021). Total Quality Management in Education. <http://naac.gov.in/docs/Books/Total%20Quality%20Management%20for%20Tertiary%20Education.pdf>
- 55) Polka, W. S., et al. (2018). Catholic School Principals' Decision-Making and Problem-Solving Practices During Times of Change and Uncertainty: A North American Analysis. *Journal of Catholic Education*, 20(1). Retrieved from: <https://digitalcommons.lmu.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1886&context=ce>

Total Quality Management School Practices, Implementation of ISO 9001: 2015 Quality Management System and Performance of Schools in the Division of Santa Rosa City, Laguna

- 56) Prestiadi, D., et al. (2017). Visionary Leadership in Total Quality Management: Efforts to Improve the Quality of Education in the Industrial Revolution 4.0. https://www.researchgate.net/publication/338445162_Visionary_Leadership_in_Total_Quality_Management_Efforts_to_Improve_the_Quality_of_Education_in_the_Industrial_Revolution_40
- 57) Revilla, R., et al. (2019). Constructing the Constructs of Quality Management and Work Productivity from the Lenses of Two Generational Cohorts: Millennial and NonMillennial. <http://ejournals.ph/form/cite.php?id=11368>
- 58) Rusjan, B. & Castka, P. (2021). Understanding ISO's 9001 Benefits and Research through an Operations Strategy Framework. https://www.fmkp.si/en/zalozba/ISSN/1581-6311/8_097-118.pdf
- 59) Sadikoglu, E. & Olcay, H. (2017). The Effects of Total Quality Management Practices on Performance and the Reasons of and the Barriers to TQM Practices in Turkey. <https://www.hindawi.com/journals/ads/2014/537605/>
- 60) Sallis, E. (2011). Total Quality Management in Education. <https://www.routledge.com/Total-Quality-Management-in-Education/Sallis/p/book/9780749437961>
- 61) Sharma, S. (2018) Total Quality Management: Concepts, Strategy and Implementation for Operational Excellence. <https://us.sagepub.com/en-us/nam/book/total-qualitymanagement>
- 62) Silva, C., et al. (2021) Sustainable Quality Management Systems in the Current Paradigm: The Role of Leadership. https://www.mdpi.com/2071-1050/13/4/2056?type=check_update&version=1
- 63) Suleman, O. (2017). Challenges to Successful Total Quality Management Implementation in Public Secondary Schools: A Case Study of Kohat District, Pakistan. <https://www.semanticscholar.org/paper/Challenges-to-Successful-Total-Quality-Management-A-Suleman-Gul/030e14486772428c19961e9a92f0902707df5390>
- 64) Sokovic, M, et al. (2017). Quality Improvement Methodologies – PDCA Cycle, RADAR Matrix, DMAIC and DFSS. http://jamme.acmsse.h2.pl/papers_vol43_1/43155.pdf
- 65) Tari, J., et al. (2017). Benefits of the ISO 9001 and ISO 14001 standards: A literature review. https://www.econstor.eu/bitstream/10419/188490/1/v05-i02-p297_488-3206-1PB.pdf
- 66) Tsou, Y., et al. (2021). The Effects of Total Quality Management and Corporate Social Responsibility on Firm Performance: A Future Research Agenda. <https://www.koreascience.or.kr/article/JAKO202109554061346.page>
- 67) Yeung, C. & Chan, L. (2017) Quality Management System development: Some implications from case studies. <https://www.sciencedirect.com/science/article/abs/pii/S0360835298000692>
- 68) Yucel, A. & Burak, M. (2017). Comparison of Emotional Intelligence Levels of Students Studying in Summer School of Physical Education and Sports with Their Life Satisfaction. <https://redfame.com/journal/index.php/jets/article/view/4104>
- 69) Zaman, A. & Anjalin, A. (2016). Implementing Total Quality Management in Education: Compatibility and Challenges. <https://m.scirp.org/papers/abstract/72759>
- 70) Zelnik, M., et al. (2017). Quality management systems as a link between management and employees. https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=&https_redir=1&article=1688&context=dubaipapers
- 71) Zimon, D. & Dellana, S. (2019). A longitudinal exploratory study of ISO 9001 certification abandonment in small- and medium-sized enterprises. <https://www.emerald.com/insight/content/doi/10.1108/IJQRM-10-2018-0284/full/html>



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