

The Status of Quality Management System's Implementation at Paranaque City College: A Contextualized Approach

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Abstract — Purpose: A quality management system (QMS) is a formalized system for documenting processes, procedures, and responsibilities for meeting quality policies and objectives. Specifically, this study documents what the PCC has done during the pilot stage of the QMS implementation using contextualized approaches.

Design and Methodology: This study utilized a descriptive approach to evaluate the status of the QMS through observation, interview, training, and Internal Quality Audit. There were 22 participants of this study. The qualitative results were assessed, collated, analyzed, and interpreted. The use of the contextualized approach was used in setting the criteria culled from the International Standards Organization (ISO) 9001: 2015, 7s Standards, Institutional Sustainability Assessment (ISA) Framework, and the Association of Local Colleges and Universities Commission on Accreditation.

Findings: Findings show that the QMS at Paranaque City College utilized the five standards recommended by the management and the Quality Assurance Department. All employees have 100% cooperation and participation by giving feedback, attending to QMS trainings, establishing common and unique forms, and 100% cooperation and participation during the audit. It was also noted that the participants were satisfied in the establishment and implementation of the standards despite the actual certification and accreditation by displaying their full support and providing positive feedback to all these undertakings. In general, the employees would want to pursue with the QMS for continual improvement purposes.

Originality/Value: The authors believe that collaboration and cooperation strategies will lead to a successful implementation of the contextualized approaches. This study is unique and original because the standards were modified and contextualized based on the actual QMS setting of the institution.

Keywords — *Continual Improvement, Quality Management System, Contextualized Approach*

I. Introduction

QMS Significance in Higher Education Institutions

Paranaque City College has installed its new college administrator in July 2020. He was able to examine the various areas for improvement at PCC, including Quality Management

System, which is the focus of this study. The researchers believe that if the quality of services will be improved, if there is an established and contextualized Quality Management System. It is also the reason why the Commission on Higher Education (CHED) established the Higher Education Quality Assurance System (CMO 46 s. 2012). This policy standard applies to both the private and public sectors in the country in order to improve learning competency-based standards and an outcomes-based quality assurance system. For CHED, quality assurance does not simply mean specifying the standards or specifications against which to measure or control quality; rather, quality assurance entails ensuring that mechanisms, procedures, and processes are in place to ensure that the desired quality, however defined and measured, is delivered. Because PCC is governed by the Commission on Higher Education (CHED), its primary responsibility to students must be met.

A quality management system (QMS) is a formalized system for documenting processes, procedures, and responsibilities for meeting quality policies and objectives. A quality management system (QMS) aids in the coordination and direction of an organization's activities in order to meet customer and regulatory requirements while also continuously improving its effectiveness and efficiency.

The most widely used approach to quality management systems is ISO 9001:2015, an international standard that specifies requirements for quality management systems. While some people use the term "QMS" to refer to the ISO 9001 standard or a set of documents outlining the QMS, it actually refers to the entire system. The documents merely describe the system.

QMS as a Strategic Tool to Increase Competitiveness

Because global competition is increasing and entrepreneurs are looking for more competitiveness tools in order to survive, the question of the necessity of quality management is very urgent these days (Priede, 2012). There are numerous reasons to implement a quality management system, and the author believes that the following are the most important:

1. Well-defined and documented procedures improve output consistency. That means that all processes (or only those that require standardization) in the company are described in a clear and easy-to-understand manner for all employees, which leads to the main idea of this standard: do everything right the first time.
2. Quality is constantly being assessed. This informs top management about whether all processes are being carried out as planned, as well as about deviations from the mean.
3. Procedures ensure that when defects occur, corrective action is taken. As previously stated, continuous measurements provide operational information about defects, allowing the company to take all necessary corrective actions as well as define preventive actions by analyzing causes.

Nurzanah, et al (2019) believes that QMS was developed in the hope that Islamic educational institutions can better manage education implementation, provide satisfying services, and quality processes involving all elements of education in total, namely, not only strive for the involvement of managers (principals) and employees (teachers and employees), but also involve all elements of the school/madrasah, including students, parents, and the community, in achieving predetermined educational goals. The decision to begin activities for implementing quality management systems should be based on knowledge (Pacana & Ulewicz, 2020). Thus, the goals of this study are: to find out the standards used by PCC to establish and implement its QMS; to determine the PCC's strategies in the establishment and implementation of QMS using the contextualized approaches; and to find out the participants' feedback for continual improvement.

Problem Formulation

By using the modified standards in establishing the QMS at PCC, the following problems were formulated:

1. What are the standards used by Paranaque City College to establish and implement the Quality Management System?
2. How did PCC establish and implement the QMS using the contextualized approach?

What are the participants' feedback for continual improvement?

II. Methodology

The study was divided into four (4) stages. The first stage was observation and feedback from the Quality Assurance Department and the Paranaque City College community, which served as the foundation for writing the policies and procedures. The training was then carried out in the Quality Assurance Department in the second stage. The third stage was the implementation of a QMS Training Series for all employees. The final stage was the audit's execution, which consisted of three steps: the opening conference, the wash up meeting, and the closing conference. This study was conducted at Paranaque City College in Paranaque City. The descriptive method was used in the study, which included observation, documentary analysis, and an actual Internal Quality Audit. As a result, all outputs were properly accounted for, monitored, and documented.

Instrument

Using observation, documentary analysis, and Internal Quality Audit results, these were carefully documented, scrutinized, analyzed, and interpreted.

Theoretical/Conceptual Framework

The Plan-Do-Check-Act (PDCA) Cycle was used as the theoretical framework of this study.

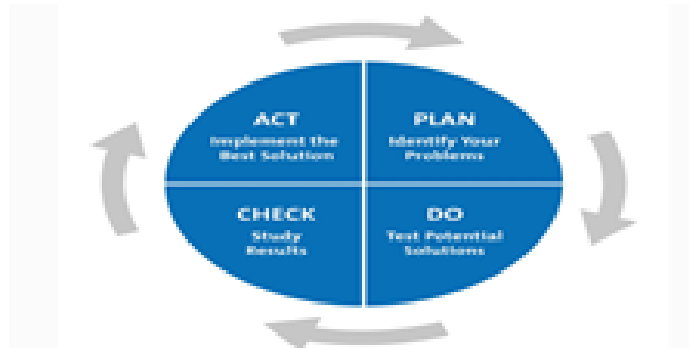


Figure 1: PDCA Model Courtesy of the W. Edwards Deming Institute

Dr. William Edwards Deming, a management consultant, developed a method in the 1950s for determining why some products or processes do not perform as expected. His strategy has since become a popular strategy tool used by a wide range of organizations. It enables them to develop theories about what needs to change and then put them to the test in a "continuous feedback loop."

Data Gathering Procedure

The study was carried out using observation and getting feedback from the Quality Assurance Department and some PCC employees. This was the basis for writing the policies and procedures at the beginning. Then, a training was conducted with the Quality Assurance Department that includes the basics of Quality Assurance, Quality Management System, International Standards Organization 90001:2015, Institutional Sustainability Assessment (ISA), and the 7s Standards. Following this was the establishment of the QMS Training Series conducted by the Quality Assurance Department. Finally, the Internal Quality Audit was conducted and the three (3) steps were followed such as: The Opening Conference, Wash Up Meeting, The Closing Conference. In the closing conference, the participants' feedback were beneficial for continual improvement purposes.

III. Results and Discussion

Problem Solution

1. What are the standards used by Paranaque City College to establish and implement the Quality Management System?

The first standard used is patterned after the International Standard Organization (ISO 9001:2015). The act of managing all activities and functions required to maintain a consistent level of excellence in an organization, product, or service is known as quality management. Quality is a critical factor in distinguishing one organization from its competitors. Implementing quality initiatives will result in superior products or services that meet or exceed customer expectations, as well as increased revenue and productivity for the organization. ISO 9001 applies to organizations of all sizes and types that want to:

- ✓ establish, implement, maintain, and improve a QMS;
- ✓ ensure that the organization's stated quality policy is followed;
- ✓ show others that you are conforming;
- ✓ seek certification/registration of its QMS from a third-party certification body; or,
- ✓ make a self-determination and self-declaration of compliance with this International Standard.

Paranaque City College utilized the said standard because of the quality management systems' principles. These principles are applicable in the attainment of excellence in terms of customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, and relationship management. These terms are easy to understand, thus, these principles can easily be applied and monitored at PCC.



Figure 2: Quality Management System Principles. Source: QMSUK.com

Before implementing a quality management system, an organization must identify and manage a number of interconnected, multi-functional processes that will help ensure customer satisfaction. The varying objectives, needs, and products and services provided by the organization should all have an impact on the QMS design. This structure is largely based on the plan-do-check-act (PDCA) cycle and allows for continuous product and QMS improvement.

The design and build phases: These are responsible for developing the structure of a QMS, its processes, and implementation plans. Senior management should oversee this portion to ensure that the organization's and its customers' needs are driving forces behind system development. One way of developing the culture of quality is through designing and building stages of the structure of QMS. The Quality Assurance has been established in the past or during the birth of Paranaque City College; however, the system has to be improved and strengthened. This time, the QA has document controller and other staff to help build and design some policies and procedures in the various departments/divisions of the institution.

The deploy phase: By breaking each process down into sub-processes and educating staff on documentation, education, training tools, and metrics. Quality management systems are increasingly being deployed with the use of technology like google drives, google forms, online audit forms, and others. The QA Department has established its policies and procedures using the google drives and forms. These are commonly shared to all members of the PCC community.

The Control and Measure phases: Control and measurement are two aspects of establishing a QMS that are largely achieved through routine, systematic quality management system audits. The specifics vary greatly depending on the size, potential risk, and environmental impact of the organization. The management of PCC controls and measures its QMS through evaluation and feedback mechanisms, Internal Quality Audits, and meetings and conferences per department/division.

The Review and Improve Phases: Review and improve the details of how audit results are handled. The objectives are to determine the effectiveness and efficiency of each process in achieving its objectives, to communicate these findings to employees, and to develop new best practices and processes based on the data gathered during the audit. PCC has adopted this system by conducting the QMS-Internal Quality Audit Systems. It also includes the opening conference, wash up meeting, and the closing conference. The findings are dealt with accordingly based on the form used.

The second standards used are the Institutional Sustainability Assessment (ISA) of the Commission on Higher Education (CHED) and the Alcuoa for accreditation. A MANDATE OF THE CHED: Section 8 (e) of RA 7722. The Commission shall have the authority and function to "monitor and evaluate the performance of programs and institutions of higher learning for appropriate incentives as well as the imposition of sanctions such as, but not limited to, subsidy reduction or withdrawal, recommendation for downgrading or withdrawal of accreditation, program termination or school closure." It is also a mandate of

CHED Memorandum Order (CMO) No. 46, series of 2012, titled "Policy Standard to Improve Quality Assurance in Philippine Higher Education through Outcome- and Typology-Based Quality Assurance." Every higher education institution (HEI) has a moral and legal obligation to provide quality programs to its students while also being efficient and effective

through quality systems. Quality programs can be measured by the quality of their students and graduates, and quality systems can be measured by tools that demonstrate the HEI's internal capacity to translate vision, policy, and strategy into quality programs and results. The institution has utilized the five (5) Key Result Areas for ISA. ISA is a quality assurance process that evaluates a HEI's institutional sustainability in five key areas:

- ✓ KRA 1: Governance and Management
- ✓ KRA 2: Quality of Teaching and Learning
- ✓ KRA 3: Quality of Professional Exposure, and Creative Work/Innovation
- ✓ KRA 4: Student Support
- ✓ KRA 5: Community Relations

The objectives of ISA are: to assist HEIs in developing institutional systems that lead to quality outcomes, as demonstrated by students and graduates whose competencies meet internationally recognized standards (when applicable) and are relevant to employment; assist HEIs in developing a quality culture, as reflected in internal QA systems that will help them perform effectively and efficiently and meet their desired outcomes and performance targets; and engage HEIs in addressing policy issues, particularly those addressing the need to improve higher education quality. On the other hand, the Alcuoa standards have been utilized by PCC but the indicators found in this standard are already embedded or part of the Institutional Sustainability Assessment (ISA) by the Commission on Higher Education. These nine (9) elements include:

- ✓ Element 1: Employability and entrepreneurship
- ✓ Element 2: Governance and administration
- ✓ Element 3: Curriculum and instruction
- ✓ Element 4: Faculty
- ✓ Element 5: Student development services
- ✓ Element 6: Extension services/community involvement
- ✓ Element 7: Research
- ✓ Element 8: Laboratories
- ✓ Element 9: Physical plant

Paranaque City College began training and workshops on ISA in October 2021 to present, and the first results were displayed during the first mid-year management review. Combining the two standards will result in a productive and practical assessment in PCC's quality management system.

ISA STANDARDS	ALCUCOA STANDARDS
KRA 1	•Elements 1,2 •Elements 8,9
KRA 2	•Element 3 •Element 4
KRA 3	•Element 7
KRA 4	•Elements 5, 8, 9
KRA 5	Element 6

Figure 3: PCC’s Combined Standards of ISA and ALCUCOA

The last standard used is the 7s as a tool for continual improvement. R. S. Agrahari et al. (2015) describe the 5S implementation methodology and guidelines for improving small-scale industry performance. The qualitative form of results obtained in the areas of safety, productivity, efficiency, and housekeeping (Joshi, 2015). The 5S methodology is a tool for enhancing continuous improvement of lean manufacturing processes, and it is a lean methodology for instituting a highly efficient, clean, and safe working environment. 5S was improved into 7S by adding the last 2S. 5S is a Toyota Production System (TPS) technique that is used in service and manufacturing organizations, primarily in manufacturing. This technique is derived from the words Sort, Straighten, Shine, Standardize, and Sustain. Through intermittent monitoring of the workplace, the 5S methodology assists the organization in consolidating a workplace for efficiency, minimizing unnecessary waste, and optimizing quality and productivity. When successfully implemented and monitored, 5S would result in a significant increase in productivity, a clean working environment, a reduction in unnecessary hazardous materials, a reduction in defects, and an increase in employee satisfaction (Sukdeo, Ramdas & Petja, 2020). Globalization is helping to support quality management systems. The increasing variety and quantity of products, the decreasing number of required machines and devices, as well as the shortening of production time and product life cycle, ensure that only organizations that can meet their customers' expectations will thrive. As a result, organizations compete for sales markets, placing a greater emphasis on quality, among other things (Wolniak, 2020).

2. How did PCC establish and implement the QMS using the contextualize approach?

Paranaque City College established and implemented the Quality Management System using the Contextualized approaches from the different documentation and accreditation standards.

Below are the strategies of PCC in the establishment and implementation of QMS:

Through Observation and Getting Feedback: Initially, the management team, which included the College Administrator, the Research Director, and the Director of the Administrative Affairs Division, including other department and division heads observed the entire institution's Quality Assurance and Quality Management System. Meetings with the QA Officer were held on

a regular basis to learn about the established system of forms, manuals, policies, and procedures. They discovered several manuals written, some policies and procedures drafted, and forms used based on observation, meetings, and a dialogic approach. However, the organization of these manuals, policies and procedures, and forms was not arranged or systematized in the same way that the ISO or 7S standards were. In this context, the researchers drafted some Quality Assurance procedures and forms, which were cascaded and discussed during the Quality Management Systems Training Series for all employees. The observation and feedback strategies were used to develop established procedures for implementing the institution's Quality Management System.

Series of Trainings for Quality Assurance Department/Division and Department Heads:

The management conducted series of trainings for QA last October 2021. Every Tuesday of the week, the department/division heads including the CA discussed the topics on ISO, ISA, Quality Assurance, and Quality Management System. The procedures manual has been initiated and the templates for procedures were established. These procedures were discussed and elaborated during series of meetings and trainings with the Quality Assurance Department.

Establishing QMS Training Series: To duplicate the training with the QA Department and Department/Division heads, this QMS Training series is intended to inform the PCC community about the QMS basics, QA basics, ISA, ISO standards and accreditation requirements of Paranaque City College. The Quality Assurance Department has created the Common Forms (CF) which are utilized by the PCC community, as a whole. All the employees have been aware of these requirements and encouraged to utilize the established procedures, forms, and manuals for a systematic and organized flow of their own departments/divisions. There were also series of 7S trainings and actual conduct of 7S at PCC through the efforts of the Research, Extension, and Linkages Division. On the other hand, the QMS Training series was held once a week or every Wednesday in order to allow the departments to explain their own established Unique Forms (UF). In this manner, no one is questioning the type of forms used per department because these were cascaded to all during the series of QMS Trainings.

Establishing the Common Forms and Unique Forms and Other Documents: As defined by the QA Team, common forms are utilized by majority of the population. All forms under these categories will be monitored by the QA Office. Unique forms are forms created by the department which are utilized only by them or other departments.

Table 1: No. of Forms Created and Coded by PCC as of April 1, 2022

Category	Created by	No. of Forms	Codes Used
Common Forms	All Departments/Divisions	25	CF-AQAO-NNN
Unique Forms	Academics	22	UF-ACAD-NNN
Unique Forms	Academics-Entrepreneurship	27	UF-ACAD-ENTREP-NNN
Unique Forms	AQAO	4	UF-AQAO-NNN
Unique Forms	Community and Extension	7	UF-EXT-NNN
Unique Forms	IRC	11	UF-IRC-NNN
Unique Forms	MDHS	11	UF-MDHS-NNN
Unique Forms	PPMO	5	UF-PPMO-NNN
Unique Forms	REGISTRAR	15	UF-REG-NNN
Unique Forms	RESEARCH	6	UF-RES-NNN
Unique Forms	ISPS	4	UF-ISPS-NNN
Unique Forms	POD	5	UF-POD-NNN
Unique Forms	SAS	7	UF-SAS-NNN
Unique Forms	SWS	20	UF-SWS-NNN
Unique Forms	OCA	2	UF-OCA-NNN
Unique Forms	BOT	2	UF-BOT-NNN
Unique Forms	HRD	9	UF-HRD-NNN

Table 2: No. of Manuals Created and Coded by PCC as of April 1, 2022

Category	Created by	Codes Used
Manual	Academics	MNL-ACAD-001
Manual	Research	MNL-RES-001
Manual	SAS	MNL-SAS-001
Manual	HRD	MNL-ADMIN-001

Table 3: No. of Procedures Created and Coded by PCC as of April 1, 2022

Category	Created by	No. of Procedures
Procedure	Quality Assurance office	12
Procedure	Curriculum and Development	11
Procedure	Research	1
Procedure	Academics	3

Establishing the QMS-IQA Training and Audits: On April 11, 2022, the QA established its QMS-IQA Training. There were 22 auditors in attendance, including the shadow auditors.

During the training, the basics of QMS, QA, the significance of the ISO, ISA, and the importance of Internal Quality Audits were all discussed. The standards were also examined and presented, and the forms to be used during the audit were clearly explained by the speaker. A short workshop on the department/best division's practices was integrated into this training to determine whether these best practices were noteworthy efforts of the department/division or a routinary activity that needed to be done or part of their job. Surprisingly, all 22 participants collaborated and presented their findings on best practices to the group. The presenters answered all of the questions that were posed to them. The speaker/facilitator assisted each individual in becoming more knowledgeable about the audit plan and its benefits to the institution. The audit was successfully conducted.

3. What are the participants' feedback for continual improvement?

Continuous improvement is operationally defined as all actions taken throughout the organization to increase the effectiveness, i.e. achieving objectives and efficiency, i.e. achieving an optimal cost/benefit ratio, of processes and controls in order to bring increased benefits to the organization and its stakeholders. An organization can continuously improve the effectiveness of its management system by utilizing the quality policy, objectives, and audit results, analysis of monitored events, indicators, risk analysis, corrective actions, and management review. The feedback from the participants was critical in order to continuously improve the system. When asked about their reflective feedback, all the employees had positive things to say. One of the division heads stated that she was pleased with PCC's current progress due to the new learning and QMS and strategies that could be implemented, monitored, and evaluated.

The majority of IQA Auditors agree that the management initiative will lead the institution in the right direction. Another division head exclaims that in the past, they have been working on this improvement for some time, but it was not formally launched and carried out, so the actual implementation of the training and audits now will improve PCC's quality management system. Finally, from the perspective of the rank and file, this quality improvement is a stepping stone toward trying to better the services of each department/division. We are more likely to improve and bring out the best in ourselves if we are guided by policies, procedures, manuals, forms, work instructions, and the like. It is also important however to be guided by quality experts to continuously maintain and sustain the quality culture at PCC. Teamwork is essential for continuous improvement. There is less output to be produced without a team that should work together, but the presence of a team that will cooperate, participate, and walk with the management will enhance and sustain the institution's Quality Management System implementation.

IV. Conclusion

Using ISO, 7S, ALCUCOA, and ISA standards will significantly improve the system at Paranaque City College. According to the institutional outputs, the PCC has 100 percent participation and cooperation as a result of its established common and unique forms, manuals,

policies, and procedures. PCC has successfully and effectively established and implemented the QMS through observations and feedback, training sessions, QMS training series, establishing common and unique forms, and an Internal Quality Audit system. In PCC, these strategies were found to be useful, practical, and effective because everyone worked hard to audit and be audited at the same time. The feedback from the participants was critical to the QMS implementation because it needs to be maintained and sustained with the assistance of QMS experts. PCC's QMS will be continuously improved through collaboration, cooperation, and teamwork.

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