

## **THE EDUCATIONAL PROCESS OF THE CEBU STATE COLLEGE OF SCIENCE AND TECHNOLOGY SYSTEM IN CONFORMANCE WITH THE PHILIPPINE QUALITY AWARD CRITERIA: PROPOSED MODEL**

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### **ABSTRACT**

This study was conducted to assess the educational process of the three campuses of the Cebu State College of Science and Technology System located in the northern part of Cebu namely: Carmen Campus San Francisco Campus; and Daanbantayan Campus whether it conform with the seven categories of the Philippine Quality Award Criteria.

In the categories of Leadership, Strategic Planning, Faculty and Staff Focus, and, Process Management, the overall findings showed that the three sets of respondents of Carmen, San Francisco and Daanbantayan Campuses were in Moderate Conformance in addressing these categories.

In the categories of Student, Stakeholder, and Market Focus, Measurement, Analysis, and, Knowledge Management; and Organizational Performance Results, the overall findings showed that Carmen Campus was in Partial Conformance in addressing these categories. It was also found out that San Francisco and Daanbantayan Campus were in Moderate Conformance in attaining these categories.

There was no significant difference among the perceptions of the three sets of respondents from the three campuses

There was a significant difference among the perceptions of the three sets of respondents from the three campuses on the other six categories of PQA.

On Leadership; Strategic Planning; Faculty and Staff Focus, and Process Management. The three campuses showed an effective, systematic approach, responsive to the current and changing educational service needs.

On Student, Stakeholder, and Market Focus; Measurement, Analysis and Knowledge Management, San Francisco, and Daanbantayan Campus showed an effective, systematic approach, responsive to the current and changing educational service needs.

On Organizational Performance Results. San Francisco and Daanbantayan Campus current performance is of high-quality in areas of importance to the college requirements. Most improvement trends and/or current performance levels are sustained. While in Carmen Campus, improvement trends are reported for most areas of importance to the organizational requirements. No pattern of adverse trends and no poor performance levels are evident in the areas of importance to the key organizational requirements.

### **INTRODUCTION**

The quest for becoming the center of excellence is the vision of educational institutions in the world today. In order to attain this quest, an institution should adopt a strategic decision to enhance the quality of its management system and equip the graduates with world-class knowledge, skills, competencies and values that would help achieve its goals and objectives. To remain competitive these goals need to be achieved in the most efficient and effective manner.

As outlined by Dr. W. Edwards Demings' principles of quality management, to be successful, the management should create constancy of purpose. This is the "stay- the-course" mentality directed toward the principle of

continuous improvement of a product or service. An institution should have a strategic quality plan for the continual improvement of processes in order to enhance the institution's performance and benefit its interested parties. The strategic quality plan is a tool that allows management to "cause" quality to happen to their level of planned expectations (Harry W. Wilson). This is the essence of ISO 9000:2000 continual improvement of the quality management system.

The ISO 9000 series of quality management system standards is an international set of standards that provide the minimum requirement for an organization's quality management system. It addresses the creation and implementation of a quality policy, the standardization of procedures, the identification and elimination of defect, corrective and preventive action, and the management review of the quality management system.

In higher education both quality assurance and quality enhancement are now considered essential components of any quality management programme (Brookes and Downie, 2002). Quality is taken as one of the most critical ingredients of competitive success and quality is recognized as a prerequisite for survival (Steingraber, 1990). The issue of survival is a concern not only of business and industry but it is also the concern of education as well. For schools to survive, they must give the quality education learners deserve to have.

Like any other business, the educational organization must always consider quality in all its products and services providing quality products and services according to customer's satisfaction. It entails full understanding of both dimensions of quality: product quality and quality service (Whiteley, 1991).

R. B. Pojasek (2001) emphasized that when it comes to measuring business excellence everyone turns to the Baldrige Model which grew out of the Malcolm Baldrige National Quality Award program, the single most influential document in the modern history of American business. Another framework for measuring organizational performance is the balanced scorecard (Kaplan and Norton, 1996). A balanced scorecard approach helps in identifying the right measures by aligning them with the organization's vision and strategy.

In the Philippines, the government adopted the Malcolm Baldrige National Quality Award Criteria as basis for creating the Philippine Quality Award (PQA). The PQA is the highest level of national recognition for exemplary organizational performance through Total Quality Management (TQM). The award focuses on results, including customer satisfaction. It is not an award for product quality or service quality but for a quality management system which hinges on continuous improvement in the delivery of products and/or services, and to provide a way of satisfying and responding to customers (<http://www.pqa.oeg.ph/award>).

The Cebu State College of Science and Technology (CSCST) System has undertaken efforts to improve the quality of education. The System's vision, mission, and goals are focused on high-level manpower with world-class knowledge, skills, competencies and values. CSCST aims to reach out for scientific and technological excellence for the benefit of their clientele and other stakeholders. The challenge has been initiated with the implementation of ISO 9001:2000 certification. The management educational system of CSCST System has been certified against this standard by the Anglo Japanese American Registrar. CSCST also submitted for accreditation in some of its offerings to AACUP. The CSCST System's commitment is to focus on continuous improvement for performance excellence, a challenge that remains to be seen. Thus this study is undertaken to see how far the CSCST System fares in its vision.

Regardless of the CSCST System's past success, the challenging question is whether or not the CSCST System is making a continuous progress. Certainly, such progress remains to be assessed. There is still that urgent need to check the progress toward meeting its organizational goals that will improve communication among the faculty, staff and leadership team and to identify strengths and weaknesses to target opportunities for improving processes and results.

With CSCST's dream of becoming a Center of Excellence in Science and Technology in this part of world, the CSCST System must live up to the existing local, national, and international standards.

Inspired by the Philippine Quality Award, the researcher come up with a model for performance excellence

as a tool in assessing the CSCST System educational process for becoming the Center of Excellence in Science and Technology. This model may serve as a working tool for guiding, managing performance, organizational planning and opportunities for active learning that may hopefully, help improve the performance of the CSCST System.

This is the essence of the study.

#### Theoretical/Conceptual Framework

The framework embodies the essential values of the seven main categories of the Malcolm Baldrige Quality Award criteria as follows:

1. Leadership. The Leadership Category examines how the organization's senior leaders address values and performance expectations, as well as a focus on customers and other stakeholders, empowerment, innovation, learning, and organizational directions. Also examined is how the organization addresses its responsibilities to the public and its communities;

2. Strategic Planning. The Strategic Planning Category examines how the organization's develops strategic objectives and action plans. Included in this category are how these strategic objectives and action plans are chosen, deployed, and measured;

3. Student, Stakeholder, and Market Focus. The Student, Stakeholder, and market Focus Category examines how the organization determines requirements, expectations, and preferences of students, stakeholders, and markets. Also examined is how the organization builds relationships with students and stakeholders and determines the key factors that attract students and partners and lead to student and stakeholders satisfaction, loyalty, and persistence and to increased educational services and programs;

4. Measurement, Analysis, and Knowledge Management. This Category examines the organization's performance management system and how the organization analyzes performance data and information;

5. Faculty and Staff Focus. The Faculty and Staff Focus Category examines how the organization's work systems and faculty and staff learning and motivation enable faculty and staff to develop and utilize their full potential in alignment with the organization's overall objectives and action plans. Also examined are the organization's efforts to build and maintain a work environment and faculty and staff support climate conducive to Performance Excellence and to personal and organizational growth.

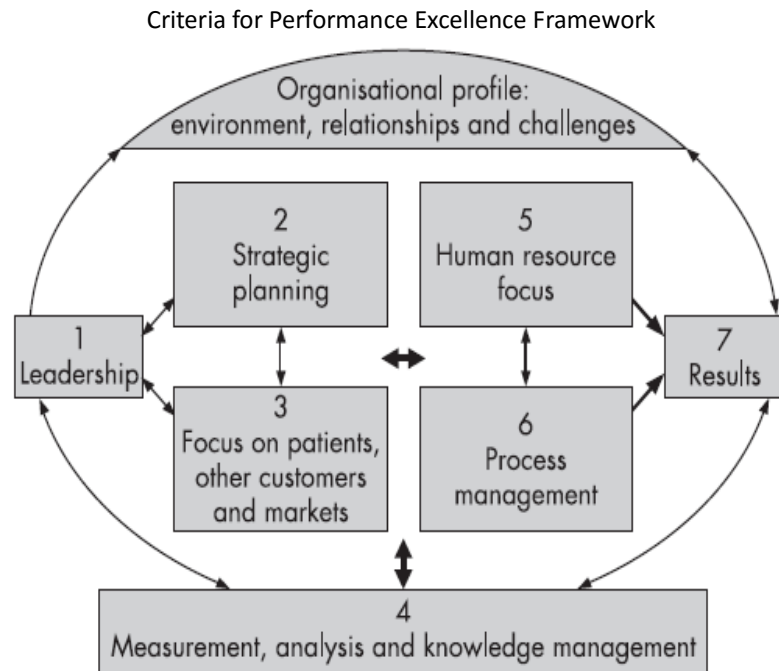
6. Process Management. The Process Management Category examines key aspects of the organization's process management, including key learning-centered processes for the educational programs, offerings, and services that create student, stakeholder, and organizational value. This category encompasses all key process and all work units; and

7. Organizational Performance Results. The Organizational Performance Results Category examines the organization's performance and improvement in student learning; student-and stakeholders-focused; budgetary, financial, and market performance; faculty and staff results; operational performance; and governance and social responsibility. Also examined are performance levels relative to those of competitors and comparable organizations.

The framework underpins two key assumptions. The first is that the leadership provided by top management is the primary driver of the business. Top management creates organizational values and goals and directs organizational improvements. The second is that the basic goal of the quality process is the delivery of ever-improving quality and value to customers (MBNQA, 2003).

The organizational profile sets the context for the way the organization operates. The environment, key working relationships, and strategic challenges serve as guide for the organizational performance management system. Leadership (Category 1), Strategic Planning (Category 2), and Student, Stakeholder, and Market focus

(Category 3) represent the leadership triad. These categories are placed together to emphasize the importance of a leadership focus on strategy and on students and stakeholders. Faculty and Staff Focus (Category 5), Process Management (Category 6), and Organizational Performance Results (Category 7) represent the results triad. The organization's faculty and staff and its key processes accomplish the work of the organization that yields the performance results. The horizontal arrow in the center of the framework links the leadership triad to the results triad, a linkage critical to organizational success. The arrow further indicates the central relationship between Leadership (category 1) and Organizational Performance Results (Category 7). The two headed arrow indicates the importance of feedback in an effective performance management system (MBNQA, 2003).



## MATERIALS AND METHODS

The study utilized the descriptive normative method of research. Statistical tools used were weighted mean and Analysis of Variance (ANOVA). Analysis of Variance was used to determine the significant difference among the perceptions of the three (3) sets of respondents from the three (3) campuses of the CSCST System.

The questionnaire was formulated based from the seven categories of the Philippine Quality Award Criteria.

### Procedure

To observe system and smoothness of the implementation of research data gathering, the following procedures were followed:

First, the researcher asked permission from the SUC President III to administer the questionnaires to the three CSCST Campuses.

Second, the research talked with the designated College Superintendent of each campus presenting the approved letter of request from the SUC President prior to the distribution of the questionnaires.

Third, after the permission was obtained, the researcher personally, administered the questionnaires. Unstructured interview was used as a secondary technique of data collection for the validity of responses.

And fourth, collation of data and tallying of the respondents' response were done.

## Statistical Treatment of Data

The data were tallied and tabulated for statistical treatment. The tabulated data were given the corresponding weight and hypothetical mean range using the average weighted mean.

**Average Weighted Mean.** To determine the perceptions of the three sets of respondents' from the three campuses of the CSCST System.

**Analysis of Variance (ANOVA).** This is used to determine the significant difference among the perceptions of the three sets of respondents from the three campuses of the CSCST System.

## RESULTS AND DISCUSSION

1. On the educational process, the following were the results:

1.1 On Leadership Category, Carmen, San Francisco and Daanbantayan Campus obtained an overall mean scores of 3.63, 3.93, and 3.57 respectively, all were describes as Moderate Conformance.

1.2 On Strategic Planning Category, Carmen Campus got an overall mean score of 3.5, San Francisco Campus obtained an overall mean score of 2.64 and Daanbantayan Campus attained an overall mean score of 3.51 all were under the Moderate Conformance.

1.3 On Student, Stakeholder, and Market Focus Category, Carmen Campus obtained an overall mean score of 3.43, which means Partial Conformance, San Francisco Campus got an overall mean score of 3.72, which indicates Moderate Conformance, and Daanbantayan Campus obtained an overall mean score of 3.73, still in Moderate Conformance bracket.

1.4 On Measurement, Analysis, and Knowledge Management Category, Carmen Campus got an overall mean score of 3.39, rated as Partial Conformance, San Francisco and Daanbantayan Campus obtained an overall mean scores of 3.82 and 3.68 respectively, all belonging to the bracket of Moderate Conformance.

1.5 On Faculty and Staff Focus Category, Carmen, San Francisco, and Daanbantayan Campus obtained an overall mean scores of 3.54, 3.89, and 3.68 respectively, all belongs to Moderate Conformance bracket.

1.6 On Process Mangement Category, Carmen Campus obtained an overall mean score of 3.52, San Francisco Campus got an overall mean score of 3.82 and Daanbantayan Campus obtained an overall mean score of 3.72 all were rated as Moderate Conformance.

1.7 On Organizational Performance Results, Carmen Campus got an overall mean score of 3.35, described as Partial Conformance, San Francisco Campus obtained on overall mean score of 3.63, rated as Moderate Conformance, and Daanbantayan Campus attained an overall mean score of 3.66, also rated as Moderate Conformance.

2. On the significant difference, the following were the results:

Of the seven (7) categories, only on Faculty and Staff Focus where there was no significant difference among the perceptions of the three (3) sets of respondents from the three (3) campuses of the CSCST System. All other six (6) categories have a significant difference among the perceptions of the three (3) sets of respondents from the three (3) campuses of the CSCST System.

### CONCLUSIONS AND RECOMMENDATIONS

From the results, the following conclusions were drawn:

1. The three Campuses showed an effective and systematic approach on the categories of Leadership, Strategic Planning, Faculty and Staff Focus and, Process Management. These Campuses were responsive to the current and changing educational service needs. The approach is well integrated in the organization with no significant gaps with other areas of work units of the College.

2. On Student, Stakeholder, and Market Focus, and, Measurement, Analysis, and Knowledge management, San Francisco, and Daanbantayan campuses showed an effective, systematic a approach responsive to the current and changing educational service needs. The approach is well integrated in the organization with no significant gaps with other areas of work units of the College while Carmen Campus showed a fact-based and systematic evaluation and improvement process for improving the efficiency and effectiveness of key College processes.

3. On Organizational Performance Results. San Francisco and Daanbantayan Campuses' current performance is good in areas of importance to the organizational requirements. Most improvement trends and/or current performance levels are sustained. In Carmen Campus improvement trends and/or good performance levels are reported for most areas of importance to the key organizational requirements. No pattern of adverse trends and no poor performance levels are evident in the areas of importance to the key organizational requirements.

Summary on the Perception of the Three Groups of Respondents of The Three Campuses of the CSCST System on the Educational Process in terms of MBQA/PQA Criteria

Educational Process in terms MBNQA/PQA Criteria	Management					Faculty									
	C	S F	D	O W M	VD	C	SF	D	O W M	V D	C	SF	D	O W M	VD
	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$		$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$		$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$	
1. Leadership	3.98	4.09	3.88	3.98	WD	3.22	3.68	3.46	3.45	MD	3.68	4.01	3.91	3.86	WD
2. Strategic Planning	3.68	3.66	3.68	3.67	WD	3.03	3.51	3.27	3.27	MD	3.79	3.75	3.59	3.71	WD
3. Student, Stakeholder, and Market Focus	3.93	3.72	3.87	3.84	WD	2.79	3.61	3.53	3.31	MD	3.53	3.81	3.79	3.71	WD
4. Measurement, Analysis, and Knowledge Management	3.70	3.91	3.71	3.77	WD	2.84	3.70	3.36	3.30	MD	3.64	3.85	3.90	3.79	WD
5. Faculty and Staff Focus	4.04	3.91	3.68	3.87	WD	2.82	3.85	3.50	3.39	MD	3.68	3.89	3.96	3.84	WD
6. Process Management	3.77	3.73	3.70	3.73	WD	3.02	3.82	3.58	3.47	WD	3.74	3.85	3.90	3.83	WD
7. Organizational Performance Results	3.44	3.56	3.61	3.54	WD	3.02	3.72	3.45	3.39	MD	3.57	3.61	3.87	3.68	WD
Overall Weighted Mean	3.79	3.79	3.73	3.77	WD	2.96	3.69	3.45	3.36	MD	3.66	3.82	3.85	3.77	WD

## RECOMMENDATIONS

The following recommendations are suggested:

1. The college senior leaders should enhance the system in setting directions and create a student-focus, learning-oriented climate, clear and visible values. The directions, values, and expectations should balance the needs of the college stakeholders.
2. In the formulation of strategic planning, it is suggested to review the college vision, mission, goals, and objectives with the involvement of stakeholders, suppliers, and partners to ensure that this vision and mission respond to current educational changes.
3. The college has to send the faculty and staff to trainings and other opportunities for continuing education as their success depends increasingly on giving them opportunities for personal learning and practicing new skills.
4. A self-assessment using the Proposed Model formulated by the researcher has to be considered to identify strengths and to target opportunities for improving the college educational processes and results.

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