PREDICTIVE MODEL OF TOTAL QUALITY MANAGEMENT (TQM) FOR EDUCATION INSTITUTIONS

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RATIONALE:

Education has to be about quality and excellence. And educational institutions are business enterprises. The quality and excellence that the educational institutions, particularly higher education institutions, aim to achieve is a transformed way of being in the world – not just...
Skills at par

Technology

knowledge

accumulation of facts
It is rather the quality of presence they share with their students, teachers, and stakeholders; and the quality of relationships they shared with each other—systems and subsystems, strategies, procedures, attitudes, and beliefs.
In the beginning of the 21st century, most institutions of higher education in the world are facing the same challenges: greater demand for enrollment, a diverse student body, the impact of globalization and expanding technological demands.
How can institutions of learning increase their overall capacity to meet the various challenges in this new millennium?
The Philippine higher education system has considerable capacity in research, teaching, physical and human resources.
Yet the system is fundamentally flawed by inequities, imbalances and distortions deriving from its history and present structure.
Higher education can play a pivotal role in the political, economic and cultural reconstruction and development of Philippines.
For it to do so, the strengths in the system must be maintained; but the weaknesses must be remedied. To preserve what is valuable and to address what is defective requires transformation.
The system of higher education must be reshaped to serve a new social order, to meet the pressing national needs, and to respond to a context of new realities and opportunities.
The study of comparative education has provided an idea that Philippines needs schooling that envisages a new system of higher education characterized by increased participation by all sectors of society;
by greater institutional responsiveness to policy imperatives, and by a new set of co-operative relations and partnerships between higher education and the broader society.
Colleges and universities today are being held to increasingly higher standards by the many groups to which they provide programs and services.
To meet these rising expectations, higher education has been challenged to continue to improve the quality of academics and the full array of co-curricular and support services.
The pursuit of the principle of quality means maintaining and applying academic and educational standards, both in the sense of specific expectations and requirements that should be complied with and in the sense of ideals of excellence that should be aimed at.
The definition of these expectations and ideals can differ from context to context, partly depending on the specific purposes pursued. Applying the principle of quality entails evaluating services and products against set standards, with an end view towards improvement, renewal or progress.
To précis the aforementioned precepts, it can be surmised that because quality is process dependent and the success of one process is dependent on how well all the processes are working, it is more effective to judge quality through a systematic assessment of the entire organization.
Thus, this study was conceived and directed to ascertain the level of total quality management of the higher education institutions, particularly in Surigao City, geared towards the development of a predictive model of Total Quality Management (TQM).
This research therefore is expected to serve as an impetus to provide evidence that quality and excellent education happens in an organization with high level total quality management index.
Profile of the Participants
• sex
• age
• civil status
• length of service;
• employment status
• highest education attainment
• type of HEI currently employed
• present employment designation/position

Total Quality Management Indicators
• Leadership
• Strategic Planning
• Customer and Market Focus
• Financial Management
• Human Resources
• Performance Management
• Curriculum Design and Development
• Research Development
• Community Relations and Partnerships
• Total Organizational Package

Predictive Model of TQM for Higher Education Institutions

Feedback
Statement of the Problem

The study assessed the index of total quality management of the higher education institutions as basis for the development of a TQM predictive model.
Specifically, it solicited answers to the following inquiries:

1. What is the profile of the participants in terms of:
   - sex;
   - age;
   - civil status;
   - length of service;
   - employment status;
   - highest educational attainment?
2. What is the level of total quality management of the higher education institutions in as assessed by the participants in the areas of:

- Leadership;
- Strategic Planning;
- Customer and Market Focus;
- Financial Management;
- Human Resources;
- Performance Management;
- Curriculum Design and Development;
- Research Development;
- Community Relations and Partnerships; and
- Total Organizational Package?
3. Is there a significant difference in the assessment of the participants as regards the level of total quality management of the higher education institutions with respect to the profile variables?
4. Which of the included total quality management indicators significantly predict the total quality management level of the participating higher education institutions in Surigao City, individually and collectively?
5. Based on the findings of the study, what predictive model of total quality management for higher education institutions may be proposed?
Significance of the Study

The very reason for conceiving this study is to help Higher Education Institutions to implement the concepts of quality management and quality improvement.
The output of this research is geared towards acquainting HEIs how to use basic quality tools to manage and improve processes. Once the basic tools are mastered, HEIs are able to determine if their processes are capable of meeting customer requirements.
If processes are capable, HEIs will know how to standardize the process to assure stable and capable performance. If processes are found to be not capable, then HEIs will know how to use the TQM model to begin improving the processes so that they will meet customer requirements.
On a micro-level, findings of this dissertation will specifically be addressed for benefit of the following individuals and sectors:
**Accrediting Bodies.** With the framework employed in this study vis-à-vis the variables used, these agencies will be more guided in making their mode of evaluation wholistic which considers all the significant facets of the entire organization. Accordingly, the input, process, and output, aspects of the organizational operations are taken into consideration.
Administrators. Understanding how to use basic quality tools allows administrators in the organization to take responsibility for the processes they manage. In general, TQM will allow administrators to understand and continuously improve the processes they manage. Administrators use of the TQM predictive model will enable them to forecast the possible success and failure lines in the course of the organizational operations thereby helping organizations to achieve breakthrough process improvement.
Commission on Higher Education (CHED). This study is a novel piece among the many studies conducted in Surigao City. Results of this research, therefore, will provide baseline data for CHED to account on the organizational quality of the HEIs in Surigao and beginning assessing them against CHED’s standards. Moreover, the findings of this study can also be used by CHED as a gauge in determining organizational capability of the HEIs in Surigao City as prospective recipients of the Center of Excellence (COE) and Center of Development (COD) grants.
Employees. Presence and sustainable implementation of TQM with the aid of the TQM predictive model will provide venue for employees to attune themselves in the genre of the highly globalized environment. With TQM, employees are given the chance to exploit their potentials to the fullest possible way by being conscious enough in working with quality and producing quality outputs. Application of the TQM predictive model will also make the employee aware of the amount of his/her contribution to the present productivity level of the concerned HEI and become more motivated, as expected, to hasten his/her workability to increase the efficiency and effectiveness level of the organization.
Researchers. This highly specialized research undertaking will provide researchers the idea to come up with studies of novelty value such as model-building other than the conventional descriptive surveys. It will also open windows for the researchers to widen their research horizon at the expense of exploiting the available research techniques, particularly on the use of highly sophisticated and robust statistical tools like regression techniques, which establish high level of confidence for validity and generalizability of findings and conclusions.
The participants of this study are the employees of the four private Higher Education Institutions in Surigao City, namely: the then San Nicolas College, now St. Paul University Surigao (SPU Surigao), Northeastern Mindanao Colleges (NEMCO), Surigao Education Center (SEC), and St. Jude Thaddeus Institute of Technology (SJTIT).

The study will be conducted in the Academic Year 2006-2007.
METHOD
Research Design

This study made use of both quantitative and qualitative approaches in research employing the descriptive-model-building design via regressional method.
Participants

The participants of this study were taken from the four private Higher Education Institutions in Surigao City. The samples of this study included only those teachers and administrators who have been serving the institution for at least three years.
Instrument

The primary instrument used in this study was a set of questionnaires. To validate some of the data gathered from the participants, some basic documents were also reviewed during the conduct of the study.
Reference documents such as the school’s strategic plan, curriculum reports, institutional reports, meeting minutes, and accrediting documents were all accessed through the help of the academic officials. These documents provided a ready made source of information that added context to the study, enhanced information gained during the interview process, and served as a method of verification.
The data gathered from the respondents were analyzed using the following statistical tools: frequency count and percentage distribution, mean and standard deviation, analysis of variance, and multiple regressions.
CONCLUSIONS

In the light of the findings of this study, the following conclusions are drawn:

1. Women dominate in Higher Education Institutions and mostly are married who are in their 31-40 years of age. Some Higher Education Institutions employ non-master’s degree holders on full-time basis, lower than the minimum academic qualification requirement.
2. The private Higher Education Institutions in Surigao City have *fairly* implemented the Total Quality Management systems, particularly in the areas of leadership, strategic planning, customer and market focus, human resources management and development, financial management, performance management, curriculum design and development, research development, community relations and partnerships, and total organizational package.
3. Length of service and highest educational attainment are variant factors of Total Quality Management index of Higher Education Institutions.
4. Leadership, strategic planning, customer and market focus, human resources management and development, financial management, performance management, curriculum design and development, research development, community relations and partnerships, and total organizational package are significant operant predictors of HEIs’ Total Quality Management index.
5. The Total Quality Management index of the private HEIs in Surigao City can be measured using this predictive model, with 99.80 percent explained variance and 0.0366 standard error of estimate:

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TQM \text{ Index}_{\text{HEIs}} (\hat{Y}) = 0.04 + 0.13 \ (X_1) \text{ Customer and Market Focus} + 0.13 \ (X_2) \text{ Strategic Planning} + 0.12 \ (X_3) \text{ Human Resources Management and Development} + 0.11 \ (X_4) \text{ Community Relations and Partnerships} + 0.11 \ (X_5) \text{ Total Organizational Package} + 0.10 \ (X_6) \text{ Leadership} + 0.10 \ (X_7) \text{ Curriculum Design and Development} + 0.10 \ (X_8) \text{ Financial Management} + 0.10 \ (X_9) \text{ Performance Management} + 0.09 \ (X_{10}) \text{ Research Development}.
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Recommendations

With reference to the findings and conclusions of the study, the following recommendations are offered:

1. Education Institutions should always update their employees’ profile, particularly their length of service and highest educational attainment and consider these variables in any organizational planning;
2. Education Institutions should ensure that their systems of feedbacking and feedback mechanisms are in place to increase leadership and customer satisfaction.

3. Education Institutions should make certain that “monitoring progress to plan” is well structured in order to attain the real strategic cycle.
4. Education Institutions should take a move to reviewing their employee evaluation and compensation systems to ensure that employees attain maximum job satisfaction. The schools should ensure that their human resource system develops the full potential of employees and drive the right behaviors in support of organizational performance and learning objectives.
5. Education Institutions should establish a system of internal control in the management of their finances to facilitate the compliance of the organization to the standards of financial management ensuring the sustainability and stability of institutional operations.
6. Education Institutions should engage in active benchmarking activities for organizational processes to be able to reach performance management excellence through development of creative management designs, procedures and systems.
7. Education Institutions should establish policy on periodic evaluation of curriculum and school activities in order to ensure that the school curriculum as a product provides venue for students’ development of functional skills and personal competencies through integration of theory and applications needed by the highly competitive industries.
8. Education Institutions should set directions for innovative research and development programs with the purpose of sustaining the life of quality and excellence in the organization. The schools should urge teachers to engage in action research activities and make research part of their teaching schema facilitative of research-based instructions.
9. Education Institutions should create aggressive designs for expansive alliances and linkages in order to maintain positive public image and gain financial assistance supportive of continuing community programs and projects as well as making community partners as the validating institutions of school’s quality assurance.
10. Education Institutions should craft highly attractive designs with the integration of marketing-mix strategies for total organizational package to amplify the school’s market share in the industry.
11. Education Institutions should take quality seriously at the institutional level and enforce themselves to always engage in continual improvement measures in order to develop and sustain the quest for quality and culture of excellence with the end view of augmenting their Total Quality Management index.
12. Education Institutions should always consider length of service and highest educational attainment of the employees whenever they make plans and decisions in the light of the Total Quality Management perspectives.
13. Education Institutions should make use of the predictive model of Total Quality Management developed in this study to measure their TQM index and use the result as a springboard in strategic planning, management and development.
14. A replication of this study should be made in order to expand the reliability and validity of results with the inclusion of other potential variables such as cross-sectional samples from basic education departments, staff and maintenance, and the like.
15. For further studies related to this research, the following topics are hereby recommended:

15.1 A Cohort Analysis on the Level of Total Quality Management among FAAP Accredited Higher Education Institutions.
15.2 A Comparative Analysis of the Total Quality Management Index among Private and Public Higher Education Institutions.

15.3 A Cohort Analysis on the Level of Total Quality Management among ISO Certified Higher Education Institutions.
• 15.4 A Relational Analysis on the Organizational Culture and TQM of Private Higher Education Institutions.

• 15.5 A Cross-Dimensional Analysis on the TQM Index of HEIs Administered by Business-Oriented and Education Graduate Top Management
Thank you.

“The Only Thing Greater Than The Power Of The Mind Is The Courage Of The Heart”

Caritas Christi Urget Nos!

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