Conformance on Quality Management System of One State College in the Philippines as Basis for ISO Certification

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Abstract –*This study sought to determine the quality management system of the Northern Negros State College of Science and Technology (NONESCOST) as basis for International Organization for Standardization (ISO) Certification. The descriptive method of research was used in this study. It utilized the ISO 9001:2008 Quality Management System Requirements Checklist and the Questionnaires on the Attitudes towards ISO 9001. The study utilized a descriptive research design.. Findings revealed that the attitude of administrators, teaching personnel and administrative staff' towards ISO 9001 in terms of benefits, challenges, recommendations and standards did not differ significantly. Findings further revealed that the employees have mostly positive perceptions of ISO 9001, resulting in positive attitudes in the workplace. Findings also revealed that the extent of conformance to the ISO 9001:2008 (QMS) Requirements in the areas of Quality Management System, Management Responsibility, Resource Management, Product Realization and Measurement, Analysis and Improvement was perceived by the respondents to be minor non-conformance. It implies that fulfillment to the ISO 9001:2008 Requirements was only satisfactory.*

Keywords *–International Organization for Standardization (ISO), Technology Quality Management System*

INTRODUCTION

Many organizations, including public higher educational institutions, have been concerned with quality for many years. ISO 9001 establishes a basic set of quality system requirements to ensure that the process is capable of consistently producing products that satisfy customers expectations. Products and services are the result of activities or processes that transform inputs into outputs. The quality of products and services is directly related to the quality of processes that produces them. With this, to improve product quality requires also improvement of the quality of processes.

Quality instruction is the the indispensable factor or influence among Higher Education Institutions where outcome-based education is emphasized, Laguador et al.[1]. American Society of Quality, defines quality as characterized diversely by every association considering the hierarchical condition and the one of a kind attributes in regards to a specific association [2]. The ISO 9000 family of standards represents an international concept on good management practices with the aim of ensuring that the organization can deliver the product or service that meet the customer's quality requirements and applicable regulatory requirements, while aiming to enhance customer satisfaction, and achieve continual improvement of its performance in pursuit of these objectives [3]. These good practices have been distilled into a set of standardized requirements for quality management system, regardless of what the organization does, its size, or whether it is private or public.ISO 9000 registration is rapidly becoming a must for any company that does business, and this includes Higher Education Institutions (HEIs).

State Universities and Colleges in the Philippines are, like other public services, increasingly called upon to become publicly accountable for what they do and to demonstrate that they deliver quality service. The urgency to improve the quality of their education is based on the following reasons: (1) competition between education institutions both in the local and world market (2) CHED had recommended closure of certain HEIs and programs that do not meet the standards of excellence; (3) under normative financing scheme, HEI would be given budget allocation

according to the number of students which is determined by the ability of the HEI to provide quality education.

The Northern Negros State College of Science and Technology has become an independent state college in 1998. Its mandate, as provided in its Charter, R.A. 8448, is to produce quality and globally competitive graduates. Evidences, however, of the quality of its management and services as shown by the performance of graduates in government licensure examinations indicate a deeper problem for NONESCOST. The past two years showed that Fisheries and Education examinees performed below the national standard [4]. Thus, there is a need to study the quality of management of NONESCOST and its performance and to come up with Quality Policy and Procedures Manual for the school as basis for ISO certification.

The reforms and innovative programs that will be introduced in the organization should match with the attitudes and skills of the people in the organization. Implementation of ISO 9001 QMS Standard depends on how it is perceived by quality success drivers in the organization, the people. Perceptions towards ISO QMS may also vary amongst different individuals based on their profile and on the organization culture.

OBJECTIVES OF THE STUDY

This study sought to determine the conformance on the quality management system of the Northern Negros State College of Science and Technology for International Organization for Standardization (ISO) Certification. Specifically, it aims to determine the profile of the respondents in terms of: age and gender, educational attainment, academic rank, and experience in government service; determine the attitude of the respondents towards ISO 9001:2008 (Quality Management System) certification in terms of: benefits, challenges, recommendations, and standards; determine if there is a significant difference on the attitudes among the respondents towards ISO 9001:2008 (QMS) certification; determine the extent of NONESCOST conformance to the ISO 9001:2008 requirements as perceived by the respondents in terms of the following five (5) major clauses: Quality Management System, Management Responsibility, Resource Management, Product Realizations and Measurement, Analysis and Improvement; determine if there is a significant difference on the perception of the respondents to the extent of NONESCOST conformance to the ISO 9001:2008 requirements and to formulate Quality Policies and Procedures Manual on the ISO 9001:2008 on the basis of the findings.

Null Hypothesis

The following hypotheses were tested at the .05 level of significance:

H_o 1. There is no significant difference as to the attitudes among the respondents towards ISO 9001:2008 certification (Quality Management System) in terms of benefits, challenges, recommendations and standards.

H_o 2. There is no significant difference on the perception of the respondents as to the extent of NONESCOST conformance to the ISO 9001:2000 requirements.

METHODS

Design

This study useda descriptive research method since it only assessed the attitudes of the administrators, administrative staff and teaching personnel and the extent of conformance to the requirements of the major clauses of ISO 9001:2008.

Respondents

This study utilized the total enumeration of the permanent employee of the college. There are 15 administrators, 30 teaching personnel, and 18 administrative staff of the Northern Negros State College of Science and Technology and 4 ISO auditors from the Cebu Technological University and the Palompon Institute of Technology. The four (4) ISO auditors from the Cebu Technological University System and of the Palompon Institute of Technology were asked to be the respondents especially on the evaluation as to the extent of NONESCOST conformance to ISO 9001:2008 (QMS) requirements.

Research Instruments

The researcher adopted the ISO 9001:2008 Quality Management System Requirements Checklist and the Questionnaires on the Attitudes towards ISO 9001.

Checklist. This instrument was used to assess the non-conformance that exists between the actual management systems against the ISO 9001:2008 standard.

Questionnaire. This instrument was used to measure the attitudes of the administrators, teaching

personnel and administrative staff towards ISO 9001:2008.

To ascertain the validity of the checklist and questionnaire, copies of these were given to the experts for their review, validation and approval before these were fielded to the respondents.

Data Gathering Procedures

The researcher personally administered the checklist and questionnaire to the respondents.

The research instruments were distributed to the respondents and were personally collected by the researcher weeks after.

These were supplemented with discussions to the respondents and observations taken by the researcher while the research instruments were answered.

The respondents were informed about the purpose of the conduct of the study. They were assured that their responses will be treated with utmost confidentiality.

Treatment of Data

Frequency and percentage were used to determine the profile of the respondents. Mean was used to analyze the attitudes of the respondents towards ISO 9001:2000 and the extent of non-conformance of a particular policy or procedure in the school to the ISO 9001:2000 Quality Management System. Single factor ANOVA was used for the significant differences as to the attitudes of the respondents towards ISO 9001:2000 and on the perception of the four (4) groups of respondents to the extent of conformance to the ISO 9001:2000 requirements.

Scoring Procedure

Qualitative terms were quantified using a Likert-type point scale. The verbal description and the scores that were used to determine the attitudes of the respondents towards ISO 9001:2000 are as follows: 4.50-5.00: Strongly Agree (SA); 3.50-4.49: Agree (A); 2.50-3.49: Undecided (U); 1.50-2.49: Disagree (D); 1.0-1.49: Strongly Disagree (SD).

The verbal description, adopted from Baldridge Criteria, and the scores that were used for assessing the quality management system requirements are as follows: ***5-Excellent (E):*** A particular requirement is conformant with the ISO Quality Management System Requirements. -An effective systematic approach fully responsive to all requirement of the item; ***4- Very Satisfactory (VS)-*** A particular requirement is not conformant. -An effective and systematic approach responsive to the multiple requirements of the item; ***3-Satisfactory (S)-*** A particular requirement is not conformant. -An effective, systematic approach, responsive to the overall purpose of the item; ***2- Fair (F)-*** A particular requirement is not conformant. -An effective systematic approach, responsive to basic purpose of the item; ***1-Poor (P)-*** A particular is not conformant. -Beginning of a systematic approach to the basic purpose of the item.

The previous descriptions were used to determine whether a particular requirement was conformed or not. The respondent checked 5 if a particular requirement was conformed and if not respondent decided whether it falls from 1 to 4. The extent of non-conformance of a particular policy or procedure in the school to the ISO 9001: 2000 quality management system was then categorized as follows where verbal description for ISO equivalent, range and adjective descriptive were given:4.50-5.00: Conformance (C)/ Excellent (E); 3.50-4.49: Needs Improvement (NI)/ Very Satisfactory (VS); 2.50-3.49: Minor Nonconformance(Mi-NC)/ Fair (F); 1.0-1.49: / Major Nonconformance (Ma-NC)/ Poor (P).

RESULTS AND DISCUSSION

Table 1. Profile of the Respondents (N= 67)

Profile		f	%
Age	51 & Above	20	30
	41-50	25	37
	31-40	18	27
	30 and below	4	6
Gender	Male	29	43
	Female	38	57
Educational Qualification	Doctorate	4	6
	Master's	15	22
	BS with Master's Units	36	54
	Bachelor	7	10
	Non0degree/Voc	5	7
Academic Rank	Professor	0	0
	Assoc. Prof.	2	3
	Asst. prof.	17	25
	Instructor	30	45
	Admin Personnel	18	27
Experience in Government Service	More than 30 years	5	7
	21-30 years	19	28
	11-20 years	17	25
	less than 10 years	26	39

Table 1 shows the profile of the respondents in terms of age, gender, educational qualification, academic rank, and experience in government service.

Data in Table 1 revealed that out of 67 respondents 20 or 30 %were 51 years old and above, 25 or 37 %

were 41-50 years old, 18 or 27 % were 31-40 years old and 4 or 6% /were 30 years old and below. As to gender, 29 or 43 % were males and 38 or 57% were females. When educational qualification was considered, 4 or 6% were doctorate degree holders, 15 or 22% were MA/MS holders, 36 or 54% were BS with MA/MS units, 7 or 10% were BS degree holders and 5 or 7% were non-degree/ vocational courses. When grouped according to academic rank, 2 or 3% were Associate Professors, 17 or 25% were Assistant Professors, 30 or 45% were Instructors and 18 or 27% were Admin Personnel. Lastly, when respondents were grouped according to experience in government service, 5 or 7% were having more than 30 years in service, 19 or 28% were having 21-30 years in service, 17 or 25% were having 11-20 years in service and 26 or 39% were having less than 10 years in service.

Table 2. Level of Attitudes towards ISO 9001:2000 in terms of Benefits

Benefits		WM	VD
Organizations with ISO 9001 registration can better compete globally.	A	4.3	A
	TP	4.5	SA
	AS	4.2	A
ISO 9001 is a requirement for continuous improvement	A	4.4	A
	TP	4.5	SA
	AS	4.3	A
Organizations with ISO 9001 registration have worldwide acceptability of their products or services.	A	4.6	SA
	TP	4.3	A
	AS	4.2	A
ISO 9001 is primarily required for organizations who aim for exporting products.	A	4.1	A
	TP	4.3	A
	AS	4.1	A
Employees view ISO 9001 and other such standards as trends which will be replaced with something else in a few years.	A	4.1	A
	TP	4.3	A
	AS	4.1	A
ISO 9001 registration is good for all organizations.	A	4.1	A
	TP	4.2	A
	AS	4.1	A
An organization that moves to ISO 9001 makes significant improvements.	A	4.4	A
	TP	4.4	A
	AS	4.2	A
Firms who get ISO 9001 registration are usually better than others before they register.	A	4.1	A
	TP	4.3	A
	AS	4.1	A
Firms with ISO 9001 are superior to those without it.	A	4.3	A
	TP	4.3	A
	AS	3.9	A
Overall Mean	A	4.3	A
	TP	4.4	A
	AS	3.2	A

Ad: Administrators; TP: Teaching Personnel; AS: Admin Staff

The level of attitudes of the administrators, teaching personnel and administrative staff towards ISO 9001:2000 are presented below in terms of benefits, challenges, recommendations and standards. Table 2 presented the level of attitudes of the respondents towards ISO 9000 in terms of benefits. It shows that the attitudes of administrators towards ISO 9000 in terms of benefits got an average weighted mean of 4.3 verbally described as **Agree;** for teaching personnel, weighted mean is 4.4 verbally described as **Agree**; and 4.2 for the administrative staff with a descriptive rating of **Agree**.

This implies that the administrators, teaching personnel and administrative staff have positive attitude towards ISO 9001 in terms of benefits. These perceived benefits by the teaching personnel obtained a weighted mean of 4.5. On the other hand, the administrators strongly agree that ISO registered organizations have worldwide acceptability of their products and services, as shown by the 4.6 weighted mean for this benefit. This result conforms to the findings of the study conducted by Eve [5] on the Perceptions and Attitudes relating to ISO 9001: an Investigation with Operational Personnel, it demonstrates that workers have generally positive view of ISO 9001, bringing about inspirational mentalities in the working environment.

Table 3. Level of Attitudes towards ISO 9001 in terms of Challenges

Challenges		WM	VD
Employees view ISO 9001 and other such standards as trends which will be replaced with something else in a few years.	A	4.1	A
	TP	3.7	A
	AS	3.9	A
Getting ISO 9001 registration is overly expensive.	A	3.7	A
	TP	4.1	A
	AS	4.3	A
Implementing ISO 9001 registration is overly expensive.	A	4.0	A
	TP	3.6	A
	AS	3.9	A
Organizations need to invest too much time to implement ISO 9001.	A	4.5	SA
	TP	3.8	A
	AS	4.1	A
Organizations need to invest too much time to their ISO 9001 registration.	A	4.3	A
	TP	4.0	A
	AS	4.1	A
Getting ISO 9001 registration is so demanding in documenting established procedures and/or processes.	A	4.1	A
	TP	3.7	A
	AS	4.2	A
Implementing ISO 9001 is an exhaustive activity such as document control and customer feed-backing..	A	4.0	A
	TP	3.8	A
	AS	4.1	A
Overall Mean	A	4.1	A
	TP	3.8	A
	AS	4.1	A

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The administrators and administrative staff obtained the same weighted mean of 4.1 with a verbal description of Agree; the teaching personnel got a weighted mean of 3.8 with a verbal description of Agree. This implies that, while there are benefits that an organization can get from ISO certification, registration and implementation, the respondents also accepted that there are challenges in getting ISO certification and registration such as expenses involved, so much time required, demanding works in the documentation of established procedures and/or processes, and exhaustive document control and customer feed-backing.

These findings are complemented by studies conducted by Al-Najjar, et al [6], it shows that factors that hinder the implementation of the standards is the lack of top management commitment.

Table 4. Level of Attitudes towards ISO 9000 in terms of Recommendations

Recommendations		WM	VD
I would encourage any organization regardless of industry to use ISO 9001 standards even if they do not seek registration.	A	4.3	A
	TP	4.4	A
	AS	4.4	A
I would encourage any organization regardless of industry to become ISO 9001 registered	A	4.1	A
	TP	4.2	A
	AS	4.1	A
I would encourage top management/senior leader to be trained in ISO 9001 for effective management administration.	A	4.4	A
	TP	4.6	SA
	AS	4.2	A
Overall Mean	A	4.2	A
	TP	4.3	A
	AS	4.1	A

Table 4 presents the respondents' attitudes towards ISO 9000 in terms of recommendations. The data shows that the administrators, teaching personnel and administrative staff got a weighted mean of 4.2, 4.3 and 4.1, respectively which are verbally described as agree. This implies that all the respondents recommended the use of ISO standards, to be ISO registered and the giving of training in ISO standards to top management/senior leaders.

As shown in Table 5, the average weighted means of the Administrators, Teaching Personnel and Administrative staff of 4.2, 4.0 and 4.2 respectively revealed similarity of their attitude towards ISO 9001 in terms of standards.

They all agree that top management commitment is essential to get standards to work in any organization; successful implementation of standards depend on employees, and industry sets the standards, with only minimal consideration for the concerns of users.

Table 5. Level of Attitudes towards ISO 9001 in terms of Standards

Standards		WM	VD
In order to get standards to work in any organization, top management commitment is essential.	A	4.5	SA
	TP	4.7	A
	AS	4.3	A
The major barrier to the successful implementation of standards is employee buy-in.	A	4.1	A
	TP	3.8	A
	AS	4.1	A
The standards industry sets the standards,with minimal consideration for the concerns of users.	A	4.1	A
	TP	3.5	A
	AS	4.3	A
Overall Mean	A	4.2	A
	TP	4.0	A
	AS	4.2	A

Data shows that both administrators and administrative staff strongly agreed that for standards to work in the organization, commitment of the top management is essential.

Similarly, a research done by Mallak et al. [7] showed that organizations looking for ISO 9001 accreditation ought to be conclusive, team-oriented, risk-averse, and should esteem dependability, focus on detail, esteem abnormal amounts of association and esteem working in a co-operative domain with great relational connections.

Table 6. Significant Difference on the Level of Attitudes among Administrators, Teaching Personnel and Administrative Staff towards ISO 9001

Variables	Group Overall Mean			F - value	P Value
	A	TP	AS		
Benefits	4.28	4.36	4.16	0.856	0.4296
Challenges	4.14	3.75	4.07	2.774	0.0699
Recommendations	4.24	4.31	4.07	0.888	0.4165
Standards	4.22	4.00	4.24	1.339	0.269

F-critical value=3.140

The data above shows that there is no significant difference on the level of attitudes of the administrators, teaching personnel and administrative staff of the college towards ISO 9001. The result can be accounted to the exposure of the administrators, teaching personnel and administrative staff to ISO lecture series conducted by the CSCST System

professors in line with the consortium of NONESCOST-CSCST Graduate Program.

The degree of conformance of NONESCOST to the ISO 9001-2000 Quality Management System requirements are presented in terms of quality management system, resource management, product realization and measurement, analysis and improvement.

Table 7. The Degree of Conformance on the Quality Management System As Perceived By the Respondents

		WM	VD
General Requirements	A	3.02	S
	TP	2.92	S
	AS	2.90	S
	IA	3.00	S
Documentation	A	2.83	S
	TP	2.85	S
	AS	3.2	S
	IA	3.0	S
Quality Manual	A	2.96	S
	TP	2.67	S
	AS	2.90	S
	IA	3.02	S
Control of Documents/Records	A	2.77	S
	TP	2.67	S
	AS	3.0	S
	IA	3.0	S
Overall Mean	A	2.91	S
	TP	3.0	S
	AS	3.3	S
	IA	3.0	S

IA – ISO Auditors

Table 7 revealed the degree of conformance on the quality management system as perceived by the respondents. This major clause for quality management system pertains primarily to the general requirement for quality management system.

The overall mean of 2.91 for administrators, 3.0 for teaching personnel, 3.3 for administrative staff, and 3.0 for ISO auditors describes the minor non-conformance of the assessed quality management system. This rating has a verbal description of satisfactory. This rating implies that there were isolated, consistent failure to fulfill the general requirements, documentation requirements, quality manual requirements and control of documents and/or records requirements. The mean rating for the quality management system was the result of the ratings from the sub-clauses on general requirements, documentation, quality manual and control of document/records which all got a satisfactory rating.

Documentation requirements obtained a mean of 2.83 for administrators, 2.85 for teaching personnel, 3.2 for administrative staff and 3.00 for ISO auditors. The descriptive rating for each mean is satisfactory with ISO equivalent rating of minor non-conformance. This is primarily due to lack of documented procedure for control of documents, control of records, control of nonconforming product, internal audit, corrective action and prevention action in NONESCOST. The study found out that procedures were not documented in the sense that they were not written in the procedure manual, those procedures that were really established, implemented and maintained as control for identification, storage, retrieval, retention time and dispersion of records were not apparently done.

Quality Manual got a mean rating of 2.96, for administrators, 2.67 for teaching personnel, 2.9 for administrative staff and 3.0 for ISO auditors. This has an equivalent descriptive rating of satisfactory and an ISO equivalent of minor non-conformance. The minor non-conformance rating was due to the fact that a written quality manual which describes the interaction among the processes of the quality management system is not in place yet. The nonconformance was ascertained when it was found out that records were not readily accessible, identifiable and retrievable.

Table 8. Perception of Respondents as to Management Responsibility Requirements

Requirements		Mean	VD
Management Commitment	A	3.53	VS
	TP	3.0	S
	AS	3.2	S
	IA	4.0	VS
Customer Focus	A	2.8	S
	TP	2.91	S
	AS	3.2	S
	IA	3.0	S
Quality Policy	A	3.12	S
	TP	2.93	S
	AS	3.0	S
	IA	3.0	S
Planning	A	3.36	S
	TP	2.95	S
	AS	2.9	S
	IA	3.0	S
Responsibility, Authority and Communication	A	3.47	S
	TP	2.79	S
	AS	3.1	S
	IA	3.0	S

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Table 8 (cont). Perception of Respondents as to Management Responsibility Requirements

Requirements		Mean	VD
Management Representative	A	2.98	S
	TP	2.81	S
	AS	2.8	S
	IA	3.0	S
Internal Communication	A	3.13	S
	TP	2.94	S
	AS	2.8	S
	IA	3.0	S
Management Review	A	3.0	S
	TP	2.79	S
	AS	2.9	S
	IA	3.0	S
Overall Mean	A	3.14	S
	TP	2.89	S
	AS	2.99	S
	IA	3.12	S

Table 8 revealed the overall weighted means of the respondents were 3.14, 2.89, 2.99, and 3.12, respectively, indicating that there are minor non-conformances on Management Responsibility Requirements. Management commitment obtained an average weighted mean rating of 3.53 and 4.0 from the administrators and ISO auditors, with an adjectival rating of very satisfactory or need improvement. This rating implies that senior management and ISO auditors perceived that commitment to the development of the quality management system was apparently provided evidence. This commitment had been done by communicating to the organization the importance of meeting customer and legal and regulatory requirements, performing management reviews and ensuring the availability of necessary resources. The teaching personnel and administrative staff, on the other hand, perceived that there are minor non-conformances to the QMS requirements. An average mean of 3.0 and 3.2 was given as rating of this requirement, which has an equivalent verbal description of satisfactory.

Customer focus was perceived by all the respondents to be minor non-conformance. It got a mean rating of 2.8 from the administrators, 2.91 from the teaching personnel, 3.2 from the administrative staff and 3.0 from the ISO auditors. All the means have an equivalent descriptive rating satisfactory. This implies that before the organization can enhance it must understand present levels of customer satisfaction.ISO has been stressing in its ISO 9004 2000 guidance for performance improvement that the success of the organization depends on the understanding and satisfying of the current and future needs and expectations of present and potential customers and end users. Quality policy requirement under management responsibility got a descriptive rating of satisfactory or minor non-conformance. Quality policy has been documented but there was no evidence to support that the quality policy has been reviewed regularly for its continuing suitability.

Planning for management system obtained a mean rating of 3.36 from administrators, 2.95 from teaching personnel, 2.9 from administrative staff and 3.0 from ISO auditors with a descriptive rating of satisfactory and an ISO equivalent rating of minor non-conformance. This was due to the insufficient evidence on the inputs for effective and efficient planning. These inputs include strategies of the organization, defined organization objectives, defined needs and expectations of the customers and other interested parties, evaluation of the performance data of the products, evaluation of the performance data of the process, lessons learned from previous experience, and indicated opportunities for improvement.

Responsibility, authority and communications were perceived as satisfactory or minor non-conformance. The mean rating of this requirement was 3.47 for the administrators, 2.79 for the teaching personnel, 3.1 for the administrative staff and 3.0 for the ISO auditors. The cause for the minor non-conformance or satisfactory rating was on defining the responsibilities and authorities of the personnel in the organization.

Management review got a verbal description rating of satisfactory or minor non-conformance from all the respondents. The result indicates that there was no apparent evidence that the organization has reviewed the organization's quality management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Thus management review is very important in the realization of the quality management system. This will ensure the opportunity to completely understand current achievement levels against required and/or intended levels.

Table 9. Perception of Respondents as to Resource Management Requirements

Requirements		WM	VD
Provision of Resources	A	2.87	S
	TP	2.85	S
	AS	2.9	S
	IA	3.0	S

Table 9 (cont). Perception of Respondents as to Resource Management Requirements

Requirements		WM	VD
Human Resources	A	2.87	S
	TP	2.88	S
	AS	2.70	S
	IA	3.0	S
Competences	A	3.2	S
	TP	2.78	S
	AS	2.9	S
	IA	3.0	S
Infrastructure	A	3.0	S
	TP	2.98	S
	AS	3.6	VS
	IA	3.0	S
Work Environment	A	2.93	S
	TP	2.82	S
	AS	2.9	S
	IA	3.0	S
Overall Mean	A	2.93	S
	TP	2.82	S
	AS	2.9	S
	IA	3.0	S

The results showed that there were sufficient manifestations that resources were really identified and made available. Human resources got a mean rating of 2.87 from the administrators, 2.88 from the teaching personnel, 2.7 from the administrative staff and 3.0 from the ISO auditors. The verbal description for the mean obtained is satisfactory. These ratings have an ISO equivalent of minor non-conformance. This implies that personnel performing work affecting product quality were not competent on the basis of appropriate education, training, skills and experience.

This is supported by the study of Masulah et al. [8] resource management are vital predecessors of hierarchical duty in the authoritative test.

Table 10 revealed that product realization was perceived to be satisfactory or minor non-conformance by the respondents. It got an average weighted mean of 3.045, 2.93, 2.94 and 3.0 from the administrators, teaching personnel, and administrative staff and ISO auditors, respectively. The satisfactory rating or non conformance implies that the organization needs to clearly understand the process applied to produce the required needs for product, including the interaction and sequencing between the "sub-processes" that go together to form the whole. A similar study conducted by Chan et al. [9] revealed that in terms of product realization the respondents viewed that the level of conformity for understanding the ISO 9001 item acknowledgment, the initial two articulations with the most noteworthy normal scores are "this unit can appropriately deal with the students information records to stay away from spillage" and "this unit can appropriately process client grievances and proposals in the most brief conceivable time".

Table 10. Perception of Respondents as to Product Realization Requirements

Requirements		Mean	VD
Planning of Product	A	3.28	S
	TP	3.21	S
	AS	3.1	S
	IA	3.0	S
Customer-Related	A	3.2	S
	TP	3.19	S
	AS	2.9	S
	IA	3.0	S
Purchasing	A	2.9	S
	TP	2.74	S
	AS	2.98	S
	IA	3.0	S
Product and Service Provision	A	2.9	S
	TP	2.81	S
	AS	2.90	VS
	IA	3.0	S
Control of Monitoring and Measuring Devices	A	2.94	S
	TP	2.68	S
	AS	2.8	S
	IA	3.0	S
Overall Mean	A	3.04	S
	TP	2.93	S
	AS	2.8	S
	IA	3.0	S

The result reveals in Table 11 that measurement, analysis and improvement were satisfactorily undertaken by the organization as perceived by the respondents. The general requirement was perceived by the respondents as satisfactory with an average weighted mean of 2.8, 2.9, 3.0, and 2.73 respectively. The ISO equivalent rating for this result is minor non-conformance. This implies that there was no objective evidence to support that the organization evidently plans and implements the monitoring, measuring and analysis and improvement processes needed to demonstrate conformity of the product, conformity of quality management system, and continual improvement for the effectiveness of the QMS.

Monitoring and measurement got a mean of 3.0 from administrators, 2.74 from the teaching personnel, 2.9 from the administrative staff, and 3.0 from the ISO auditors. The result is minor non-conformance to the ISO standards. This showed that there were no evidences that the organization monitors information

relating to customer perception as to whether the organization has met customer requirement.

Table 11. Perception of Respondents as to Measurement, Analysis and Improvement Requirements

Requirements		Mean	VD
General Requirements	A	2.8	S
	TP	2.73	S
	AS	2.9	S
	IA	3.0	S
Monitoring and Measurement	A	3.0	S
	TP	2.74	S
	AS	2.9	S
	IA	3.0	S
Control of Non-Conforming Product	A	3.0	S
	TP	2.74	S
	AS	2.98	S
	IA	3.0	S
Analysis of Data	A	3.05	S
	TP	2.81	S
	AS	2.90	S
	IA	3.0	S
Improvement	A	3.28	S
	TP	2.68	S
	AS	2.8	S
	IA	3.0	S
Overall Mean	A	3.04	S
	TP	2.73	S
	AS	2.92	S
	IA	3.0	S

A satisfactory rating or minor non-conformance was perceived by the respondents on the requirement of control of non-conforming product. This rating indicates that appropriate actions were satisfactorily taken to identify and control of non-conforming product. The satisfactory rating obtained from the respondents means that the implementation of the sub-clause is of minor non-conformance.

Improvement was perceived to be minor non-conformance or satisfactory by the respondents. This result implies that the school had not evidently proved its continual improvement, corrective action and preventive action.

Table 12 reveals the significant difference on the perception among the respondents as to NONESCOST Compliance to the ISO Requirements

Table 12. Significant Difference on the Perception among the Respondents as To NONESCOST Compliance to the ISO Requirements

Major Clauses	Respondents	Overall Mea	F-value	P-Value
Quality Management System	Administrators	2.90	1.07	0.37
	Teaching Personnel	2.81		
	Admin Staff	3.00		
	ISO Auditors	3.31		
Management Responsibility	Administrators	3.14	0.61	0.61
	Teaching Personnel	2.89		
	Admin Staff	2.98		
	ISO Auditors	3.10		
Resource Management	Administrators	2.93	0.17	0.92
	Teaching Personnel	2.83		
	Admin Staff	2.96		
	ISO Auditors	2.85		
Product Realization	Administrators	3.02	0.21	0.89
	Teaching Personnel	2.87		
	Admin Staff	2.90		
	ISO Auditors	2.95		
Measurement Analysis, Improvement	Administrators	3.04	0.74	0.53
	Teaching Personnel	2.73		
	Admin Staff	2.92		
	ISO Auditors	3.00		

f-critical value= 2.74

Table 12 shows that there is no significant difference on the extent of conformance/compliance of NONESCOST to the ISO requirements as perceived by the four (4) groups of respondents. This means that the administrators, teaching personnel, administrative staff and ISO auditors do not differ significantly on their perception that NONESCOST has minor non-compliance (satisfactory) to the ISO requirements on the major clauses of quality management system, management responsibility, resource management, product realization and measurement, analysis and improvement.

CONCLUSION AND RECOMMENDATION

Based from the findings, it was concluded that respondents perceived NONESCOST to have minor non conformance's to the ISO 9001:2008 requirements on the areas such as Quality Management System, Management Responsibility, Resource Management, Product Realization, Measurement and Analysis and Improvement. It was further concluded that employees have positive attitude towards ISO certification.

The Proposed Quality Policies and Procedures Manual should be implemented by the Northern Negros State College of Science and Technology to improve its performance of meeting and satisfying

customers' requirements and as basis for future ISO certification.

This study also recommends that there should be a competent Quality Management Representative (QMR) who should have the responsibility and authority of ensuring that processes needed for the QMS are established, implemented and maintained, reporting to top management the performance of the QMS and any need for improvement, and ensuring the promotion of awareness of customer requirements throughout the organization.

The organization should plan and implement the monitoring, measurement, analysis and improvement processes needed in ensuring the organization's performance and the satisfaction of interested parties. Research on the needs of industries should be made to suit the school's curriculum to these needs. Evaluation of teachers and students performance should be done at planned intervals and the data on these evaluations should be kept as bases for decision making. Customer feedbacks should be monitored, recorded and acted upon for continuous improvement.

The school should have a pool of experts in management and in different field of sciences and technology trained as internal auditors to examine the QMS of the organization. This is a proactive attempt for an ISO certification of the different programs and could help in AACCUP accreditation.

Future studies on quality management system for educational institutions to simplify the research instrument used to assess the status of the quality management system.

REFERENCES

[1] Laguador, Jake M., Dotong, Conrado I., De Castro, Everlyn A. (2014). The Experience of the Lyceum Philippines University- Batangas in Getting Ahead of Accreditation and Certification, International Journal of Social Sciences, Arts and Humanities, 2(2), 56-61.

[2] American Society of Quality Control, (2013). Retrieved December 12, 2015.

[3] Selection and Use of the ISO 9000 Family of Standards, (2016). Retrieved from https://goo.gl/5B5fRT, November 5, 2016.

[4] NONESCOST Annual Report 2004-05.

[5] Eve, Arnaud (2016). Economics and Management Journal, 22(1), 27-52.

[6] Sabah M. Al-Najja, Maha K. Jawad (2011).ISO 9001 Implementation Barriers and Misconceptions: An Empirical Study, International Journal of Business Administration, 2(3), 118-120.

[7] Larry A. Mallak, Liwana S. Bringelson, David M. Lyth, (1997) "A cultural study of ISO 9000 certification", International Journal of Quality & Reliability Management, 14 (4), 328

[8] Esther Masulah, Dr. Arsiah Bahron, Oscar Dousin (2012). Perception of Success on the Implementation of ISO 9001: 2008 and its Influence on Organizational Commitment, International Journal of Research in Management & Technology, 2(4), 358-365.

[9] Shi-Hsuan Chan, Prof. Flora C.I. Chang, Janet I. C. Lee (2007). A Study of implementation of ISO Quality Assurance System for Administrative Staff in University, Retrieved from https://goo.gl/4EEfuz on January 6, 2016.