
ABSTRACT

This study was conducted for the purpose of evaluating the Instruction Forms of the College of Maritime Education of Naval State University for International Standard Organization (ISO 9001: 1994) Quality Management System. The descriptive method employing the documentary analysis was used to assess the instruction forms of CME-NSU for ISO 9001: 1994 QMS. Forty-six personnel were involved. The questionnaires were taken from the quality standard (Level III), quality records under the applicability elements of ISO 9001. Friedman's chi-square for ranked data was used treating the data gathered. The topics included were: to rate the extent of quality policy/procedures implementation of instruction, to find out how acceptable are the instruction forms of CME-NSU as to the following forms: Observation Forms (Lecture and Laboratory); acceptability and effectiveness of the Faculty Performance Evaluation System along: instruction (FPES Form I-Classroom Observation); Instruction (FPES Form II); Research and Development (FPES Form III); Extension and Production (FPES Form IV); Intervening Factors (FPES Form V). The quality policy/procedure was fully implemented. Observation Form for Lecture and Laboratory Classes perceived as highly acceptable and Faculty Performance Evaluation System (FPES Forms I-V) were very highly acceptable by administrator, faculty and key personnel.

KEYWORDS: Instruction Forms, ISO 9001:1994, Quality Management System, College of Maritime Education - Naval State University-Main Campus.

**INTRODUCTION
RATIONALE**

The Philippine government effort to improve the quality of education in the Philippines, it is proper for Naval State University-College of Maritime Education (NSU-CME) to assess the contribution towards the delivery of quality in higher education and at par with the best universities in the world with NSU's vision of becoming center of excellence. Concept of excellence is used by the institution because: 1) it places the major focus of teaching-learning strategies; 2) it passes similar types of challenges for all organization regardless of resources and for increasing student preparation/abilities; 3) it is meant likely to stimulate learning related research and to offer a means to disseminate the result of such research; 4) it offers the potential to create an expanding body of knowledge of successful teaching-learning practices in the evident range of organization (Malcolm Bridge National Quality Award Program, 2000). Consolidation of the current International Standard Organization (ISO 9001, 9002 and 9003) into a simple standard of ISO 9001, centered on quality. It is a model for quality assurance in design, development, production, installation and servicing activities, ISO 9001 was the standard envisioned by the research (ISO 9000:2000 – The Changes, p. 2, Oct. 2000).

Concern of the total quality in higher education, target behind the philosophy in which the study is enhanced because of the following reasons: 1) the need for a renewed focus in quality systems from several sources; 2) it recognizes the need of continuous development of the people who are all part of the higher education system whether students, faculty and administrators; 3) it involves principles applicable to institutional administration and classroom teaching, thus providing a bridge between traditionally separated parts of the system; 4) it will help met the challenges of the 1990

and build effective universities and colleges of the 21st century (Smith and Lewis, 1998). It is also concern of the Quality Management System (QMS) to ensure efficient and effective: delivery of instruction, customer-relation, and technology management, transfer of product process or service to satisfy given needs.

The observation for lecture classes is divided into three components, namely: Teacher component, that will evaluate the subject preparation and the methods in delivery of the subject matter, followed by the student component that will assess the interaction and preparedness in the discussion and learning, and environment component that assess the conduciveness of the learner's atmosphere. The dean together with the department chair will use this form during their classroom observations.

The researcher ventured in this study to fully appraise the Instruction Forms of NSU-CME as used for ISO 9001:1994 QMS Implementation. Results of which could be used in designing quality assessment tools that support the activity to met the standard requirements.

METHODS

This research study applied descriptive method employing analysis to assess the instruction forms of the NSU-CME for ISO 9001:1994 QMS and come up with a quality assessment tools. It was descriptive because it describes the existing status of ISO 9001:1994 based on the core activities along the selected major areas in teaching. The research setting of this study was the CME certified by Det Norski Veritas (DNV) of NSU. The questionnaire was the principal tool used to elicit relevant information that answered the specific questions. It contained the following parts: Part I pertained to the quality policy/procedures implementation instruction. Part II was the acceptability of observation forms (Lecture and Laboratory Classes) as used for ISO 9001:1994 QMS implementation categorized into three areas: Teachers, Students, and Learning Environment; Part III was the evaluation form for Faculty Performance Evaluation System along: Instruction (FPES Form I & II), Research and Development (FPES Form III), Extension and Production (FPES Form IV), and Intervening Factors (FPES V).

There were three groups of respondents involved in the study. The first group was composed of administrators which included President, Vice-President for Academic Affair, Vice-President for Administrative Affair, Quality Assurance Manager (QAM), Dean (CME), Chair of Marine Transportation and Marine Engineering. The second group was composed of 26 Faculty members, and third group was composed of 13 key personnel who included the Human Resource Management Officer (HRMO), Supply Officer, University Physician, Librarian, Registrar, Shipboard Training Officer (STO), Guidance Counselor, Research Director, Internal Auditor, Records Officer, Budget Officer, School Nurse and Accountant. The procedures followed in gathering data were: permit to conduct the study was sought an official request to administer the questionnaire through approval of the university president, after permission was granted, questionnaires was fielded personally by the researcher to the different respondents; Interviews were conducted to supplement doubtful responses in the questionnaire of the respondents. The retrieval was completed for 2 months after distribution of the instruments.

The frequency count, percentage and weighted mean were used to determine the extent of quality policy/procedures implementation in instruction; the acceptability of observation forms in instruction for lecture and laboratory classes, categorized into three areas: Teacher, Student, Learning Environment for ISO 9001:1994 QMS; and the evaluation form for Faculty Performance Evaluation System along: Instruction, Research, Extension and Intervening Factors.

The Friedman's Chi-square Ranked Data was used to determine the significant mean difference in the perception of the three groups of respondents on the observation forms (lecture and laboratory classes) categorized into three areas: Teacher, Student and Learning Environment; and Evaluation Form for Faculty Performance Evaluation System along the following forms: Instruction (FPES form I & II), Research (FPES Form III), Extension (FPES Form IV), and Intervening Targets (FPES Form V).

RESULTS AND DISCUSSIONS

The extent of implementation of policies and procedures in instruction based on the core activities along selected areas in teaching.

The perceptions made by the administrators, faculty and key personnel were made the basis of determining the extent of quality policy/procedures implementation in instruction, acceptability of instruction forms in NSU-CME for ISO 9001:1994 QMS and the effectiveness of the evaluation forms for faculty performance evaluation system in instruction, research and extension and intervening factors were made valuable and fully implemented.

Quality Policy

In the quality policy the key personnel's perceptions were fully implemented as indicated by the weighted mean of 2.86 in establishing documented policy to ensure the needed equipment and suitable environment provided and maintained is one of the important policies in NSU-CME in the management of organization.

Quality Procedures

For quality procedures as by perception of the faculty with 2.89 weighted mean. It means that teacher perceived the assigned instruction responsible for lecture and laboratory teaching in accordance with laboratory/lecture objectives and corresponding syllabus, Instructor's Guide (IG's) of the specific subject prepared as fully implemented.

Table 1: Extent quality policy/procedure implementation in instruction as perceived by administrators, Faculty, and key personnel

		Administrator		Faculty		Indicators Key Personnel	
WM	VD	WM	VD	WM	VD	WM	VD
1.	Quality Policy	3.00	FI			3.00	FI
	2.86	FI					
2.	Quality Procedures	2.86	FI			2.89	FI
	2.79	FI					
Total Ave. Weighted Mean		2.93	FI			2.95	FI
	2.83	FI					

3.2-A: Observation forms for Lecture Classes for ISO 9001:1994 QMS perceived by Administrators, Faculty, and Key Personnel

Administrator

The perception on the observation form for lecture classes as evaluated by school administrators is presented in table 2. The administrator-respondents evaluated the observation form in instruction for lecture classes for the implementation of ISO 9001: 1994 QMS with a weighted mean of 4.72, describing the form agreement as very extensive.

Table 2: Observation Form for Lecture Classes for ISO 9001: 1994 QMS as Perceived by Administrator, Faculty, and Key Personnel

Indicators	Administrator		Faculty		Key Personnel		VD	
	WM	VD	WM	VD	WM	VD		
1. Statement construction follows standard rule in grammar				4.86	SA	4.58	SA	4.62
		SA						
2. Content areas of evaluation are comprehensive				4.43	A	4.54	SA	
		4.31	A					
3. Statements have the capability to comply the needed task				4.86	SA	4.62	SA	4.62
		SA						
4. Task required are clearly presented		4.86	SA		4.46	A		4.62
				4.57	SA	4.58	SA	4.38
5. Content is properly organized								A

Faculty

The observation forms for lecture classes for ISO 9001:1994 QMS were evaluated by the faculty-respondents themselves. Strongly agreed were their responses except for the task requiring clear presentation which had a mean of 4.46. The average mean of 4.56 interpreted as strongly agree for the implementation of ISO 9001: 1994 was the overall rating given by the faculty-respondents themselves.

Key Personnel

As reflected in the table 2, statement construction follow standard rules in grammar obtained as weighted mean of 4.62 interpreted as strongly agree; the same is true with the guidelines in the form evaluation as statements have the capability to comply needed tasks (M=4.62); and tasks required as clearly presented (M=4.62). The rest of the items like content is properly organized (M=4.38) and content/ area of evaluations are comprehensive (M=4.31) were interpolated as agree. The average weighted means was 4.51 interpreted as strongly agree. This means that the faculty as perceived by the key personnel were concerned with strengthening their activities to always render them regularly.

3.2-B: Observation form for Laboratory Classes for ISO 9001:1994 QMS perceived by Administrators, Faculty, and Key Personnel

Administrator

As reflected in table 3, the average weighted mean of 4.48 explain that the administrators agreed to the implementation of the ISO 9001:1994 QMS observation form for laboratory classes. Effective implementations of the observation form for laboratory classes were necessary in assessing students' achievement in the course. The lack of logical sequence in the arrangement of concepts and learning tasks could adversely affect the rate of student's progress in acquiring the mastery of implementation of the observation form for laboratory classes. There is therefore a need to improve the content/area of evaluation to be comprehensive.

Table 3: Observation Form for Laboratory Classes for ISO 9001: 1994 QMS as Perceived by Administrator, Faculty, and Key Personnel

Indicators	Key Personnel		Administrator		Faculty			
	WM	VD	WM	VD	WM	VD		
1. Statement construction follow rules in grammar	4.54	SA			4.71	SA	4.46	A
2. Concepts/areas of evaluation are comprehensive	4.23	A			4.14	A	4.23	A
3. Statements have the capability to comply the needed task	4.46	A	4.71	SA			4.50	SA
4. Tasks required are clearly presented	4.43	A			4.46	A		4.31
5. Content is properly organized	4.31	A	4.43	A			4.27	A
Average Weighted Mean	4.37	A			4.48	A	4.27	A

Faculty

The observation forms form laboratory classes are quality records which shall be made available for the evaluation the implementation of ISO 9001:1994 QMS, to reveal its specific points of the strengths and weaknesses. Five items described the observation form for laboratory classes which the faculty-respondents evaluated as agreed. Manifested as agreed was the content/areas of evaluation are comprehensive. This means that the conditions of the observation forms for laboratory classes must be adequate to develop the desired competence. The situation must be within the level of experience of the learners to function well. This led to the implication the need to improve the contents/areas by following Ornstein and Hunkins/criteria for content development which are indicated as follows: 1) validity - verifiable, and not misleading or false; 2) significance - constantly reviewed so that the worthwhile content-basic ideas, information, principles of subject is taught; 3) balance – promote macro and micro knowledge, students should experience the broad sweep of content; 4) interest – best learned when it is interesting; 5) self-sufficiency – help gained maximum sufficiency in the most economic manner; 6) useful or practical in some situation outside the lesson; 7) learn ability – capacity of the students to learn; 8) feasibility – needs to consider time, resources, materials, curriculum guides, national test, existing legislation, and political climate or the community.

Key Personnel

The key personnel strongly agreed that the statement construction of the observation form for laboratory classes follow rules in grammar. They also agreed that contents/areas of evaluation should be comprehensive; statement should have the capability to comply the needed task. Tasks required should be clearly presented; and that content should be properly organized. Evaluation obtained an average weighted mean of 4.4 interpreted as agree which means that the respondents perceived the indicators as essential in evaluating the implementation of the form. Furthermore, the agreed that forms to be effective must be based on certain criteria or standard which must be in conformity with the accepted philosophy and objectives of education.

Acceptability of Instruction : (FPES Form 1 – Class Observation) as Perceived by Administrator, Faculty, and Key Personnel

The data shows in table 4 of the evidence of learning in the subject in terms of course objectives, from random sample classes midterm/final examination papers was perceived by the administrator and key personnel as very highly acceptable, with the mean of 4.86 and 4.62 respectively while for faculty, highly acceptable with a mean of 4.46. The last indicator submitting course syllabi, test questions, grade sheets, etc on time was perceived by the administrator; faculty and key personnel very highly acceptable with mean of 4.86, 4.62 and 4.54 respectively. They were in perceiving that the totality of FPES Form 1 – class observation is very highly acceptable as manifested in the average weighted mean of 4.83 for administration, 4.69 for faculty and 4.60 for key personnel.

Table 4: Acceptability of Instruction: (FPES Form 1 – Class Observation) for ISO 9001: 1994 QMS as Perceived by Administrator, Faculty, and Key Personnel

Indicators	Key Personnel		Administrator		Faculty	
	WM	VD	WM	VD	WM	VD
1. Submitted updated syllabus, IG's, etc.	5	VHA	4.92	VHA	4.62	VHA
2. Major examination reflect in higher development/teaching level	5	VHA	4.92	VHA	4.69	VHA
3. Produced quality relevant IM's used in the subject	VHA	4.54	4.43	HA	4.54	4.54
4. Show evidence/outputs of the subject	4.86	VHA	4.46	HA	4.62	VHA
5. Submitted syllabus, test question, TOS, etc on time	VHA	4.86	VHA	4.62	VHA	4.54

Acceptability of Instruction : (FPES Form II – Class Observation) as Perceived by Administrator, Faculty, and Key Personnel

Teacher factor plays an important role in the teaching-learning process thus table 5 presents the three groups of respondents. Analysis revealed that demonstrating sensitivity to absorb content information was very highly acceptable for administrator (M=4.88), faculty (M=4.96), and key personnel (M=4.85). In totality this Form FPES II Form – Related Behavior was very highly acceptable as shown by the average weighted mean of 4.69, 4.73 and 4.69 by the administrator, faculty and key personnel.

Table 5: Acceptability of Instruction: (FPES Form II – Class Observation) for ISO 9001: 1994 QMS as Perceived by Administrator, Faculty, and Key Personnel

Indicators Key Personnel	Administration				Faculty	
	WM	VD	WM	VD	WM	VD
	1. Demonstrate sensitivity to student's ability 4.85 VHA	4.88	VHA	4.96	VHA	
2. Integrate sensitivity of the learning objectives VHA 4.62 VHA	4.43	HA	4.81			
3. Available to students beyond official teaching hours VHA	4.57	VHA	4.62	VHA	4.77	
4. Coordinates students needs internal/ external 4.69 VHA	4.57	VHA	4.58	VHA		
5. Supplement available resources	5.00	VHA	4.69	VHA	4.54	VHA
Average Weighted Mean	4.69	VHA	4.73	VHA	4.69	VHA

Acceptability of Instruction : (FPES Form III – Class Observation) as Perceived by Administrator, Faculty, and Key Personnel

This form is used to evaluate the performance of the teacher in the area of research and development. Data showed in table 6 that on the extent of acceptability of FPES Form III – Research and Development. Conduct of research was perceived as very highly acceptable by the administrator (M=4.86), faculty (M=4.88), and key personnel (M=4.64); development of research materials was also perceived as very highly acceptable by the administrator (M=4.71), faculty (M=4.62) and key personnel (M=4.54). on the other hand, research based activities was perceived by the key personnel as very highly acceptable (M=4.69), while administrator (M=4.27) and faculty (M=4.42) perceived it as highly acceptable. In general the three respondents: administrator, faculty and key personnel perceived the FPES Form III – Research and Development as very highly acceptable as manifested by the weighted mean of 4.62, 4.64 and 4.64 respectively.

Table 6: Acceptability of Instruction: (FPES Form III – Class Observation) for ISO 9001: 1994 QMS as Perceived by Administrator, Faculty, and Key Personnel

Indicators Personnel	Administrator		Faculty		Key
	VD	WM	VD	WM	WM

1. Research conducted	4.86	VHA	4.88	VHA	4.69	VHA
2. Developing IM's, Textbook, Module, Workbook, etc	4.71	VHA	4.62	VHA	4.54	VHA
3. Research activities such as seminar write-shop, proposal hearing and etc	4.27	HA	4.42	HA	4.69	VHA
Average Weighted Mean	4.62	VHA	4.64	VHA	4.64	VHA

Acceptability of Instruction : (FPES Form IV – Class Observation) as Perceived by Administrator, Faculty, and Key Personnel

This form evaluates the teacher in his/her performance in research as well as production. Extension services are usually off campus with the main purpose of helping the community-based needs. It can be deduced from the responses that this function was accepted and diligently performed by each faculty member thereby extending the much needed assistance to the community. The involvement in the community outreach (program, project, other extension activities, income generating project, extension publication; co-curricular, extra-curricular activities) was perceived as very highly acceptable by administrator (M=4.71), faculty (M=4.61) and key personnel (M=4.61).

Table 7: Acceptability of Instruction: (FPES Form IV – Class Observation) for ISO 9001: 1994 QMS as Perceived by Administrator, Faculty, and Key Personnel

Indicators Personnel	Administrator		Faculty		Key	
	WM	VD	WM	VD	WM	VD
1. Involvement in community outreach (program, project, other extension activities, income generating project, extension publication, co-curricular and extra-curricular activities)	4.71	VHA	4.61	VHA	4.61	VHA
Average Weighted Mean	4.71	VHA	4.61	VHA	4.61	VHA

Acceptability of FPES Form V – Intervening Factors for ISO 9001:1994 QMS as Perceived by Administrator, Faculty, and Key Personnel

As shown in table 8, first and second indicators perceived as very highly acceptable by administrator, faculty, key personnel in the implementation on intervening factors for ISO 9001:1994 QMS. This implies that persons concerned were always offer services at all voluntary for extra beyond regular time and give his/her best of all times; third indicator frequently volunteers to perform services beyond office hours as highly acceptable and fourth and fifth indicators perceived by administrator as highly acceptable. It means work willingly extra assignments within office hours only and seldom complies with request to perform extra work. The fourth and fifth indicators perceived as very highly acceptable by the key personnel.

Table 8: Acceptability of Intervening Factors for FPES Form V for ISO 9001: 1994 QMS as Perceived by Administrator, Faculty, and Key Personnel

Indicators Key Personnel	Administrator		Faculty	
	WM	VD	WM	VD
1. Always offer services at all voluntary for extra work beyond				

his regular time and expected performance standard		4.86	VHA	4.77	VHA	4.77	VHA
2. Gives their best at all times	4.86	VHA	4.81	VHA	4.62	VHA	
3. Frequently volunteers to perform services beyond office hours	4.29	HA		4.46	HA		4.46
4. Works willingly extra assignments within office hours only	4.43	HA		4.62	VHA	4.69	VHA
5. Seldom complies with request to perform extra work	4.43	HA		4.42	HA		4.85
Average Weighted Mean		4.57	VHA	4.62	VHA	4.85	VHA

CONCLUSIONS

Based on the findings by this study, the following conclusions were drawn:

1. The quality policy and procedure in ISO 9001:1994 Quality Management System were fully implemented.
2. The instruction forms were acceptable and effectively used in the implementation of ISO 9001:1994 QMS.
3. The three sets of respondents differed in their perceptions in the implementation of ISO 9001:1994 QMS as provided by Observation Form for Lecture, Laboratory, and Faculty Performance Evaluation System along Instruction, Research, Extension and Intervening Factors.

RECOMMENDATIONS

In light of the findings and conclusions this study recommended the following measures to bring about a sustainable and enhanced implementation of the Instruction for ISO 9001: 1994 in Naval State University – College of Maritime Education.

1. A periodic evaluation of the different Instruction Forms as used for ISO 9001:1994 QMS is done.
2. Strict adherence to quality policies and procedures approved by the management was highly recommended so that any violations thereof and non-conforming behaviour/action/performance could be dealt with accordingly.
3. It was recommended that budgetary requirements to carry out the strategies in the implementation of the Proposed Continual Improvement Scheme be appropriate by the management to facilitate quality output.
4. It was strongly recommended that the implementation of the Proposed Continual Improvement Scheme be considered by top management to sustain and enhance the Quality of Instruction Forms for ISO 9001:1994 QMS.
5. Implementation activities shall be granted towards compliance of the requirements of ISO 9001:2000 (Revised version of ISO 9001:1994)

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