

# APPLYING UNIFIED CRITERIA IN MET: THE WAY TO GLOBALIZATION

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**Abstract** Recent radical changes in political, economic, and educational concepts have impacted educational systems all over the world. Competition is no more limited to commodities and services but extends to other domains, such as the qualification and training of the human being. Graduates of maritime institutions will have to compete to secure jobs in the maritime industry. Maritime communities have either to participate in this wave of globalization or suffer exclusion from the map of maritime communities of excellence.

A comprehensive maritime strategy could be developed under the umbrella of IAMU. Such a strategy, which depends on cooperation between maritime institutes and academies all over the world, should aim at the development of an excellent culture of quality education and training. IAMU is now in a position to direct MET toward globalization, which is the core of this paper.

Considering that IAMU is in charge of developing maritime education and training, maritime safety and security, protection of the marine environment, and promotion of proficiency in English, which is the lingua franca of the sea, it should aim at developing effective mechanics to achieve total quality in MET through the establishment of global criteria governing maritime education and training. In other words, IAMU should lead the move toward globalization of maritime education and training, which is the main concern the present paper.

**Keywords** globalization; global MET criteria; quality assurance; education pivots; IAMU role

## 0 Introduction

The accelerating changes in all the walks of life are the typifying feature of the modern age; they have resulted in eliminating the borders of countries and in the globalization of organizations, the most important of which are educational organizations, together with globalization of educational systems. These accelerating changes have had a profound impact on competition within the field of quest for knowledge in this age of technology and communications. These changes have necessitated reviewing all educational systems. The maritime educational system is of course no exception. Educational systems of all types should be reviewed and modified to cope with the explosion of knowledge and the tremendous developments in technology. The old concepts of traditional educational systems are no longer capable of accommodating these new developments. Obviously, there is an urgent need to adopt new instruction and assessment techniques according to international standards with a view to achieving lifetime and self learning.

The world is characterized by continuous activity. It has been observed that in the past three decades international shipping sustained momentous changes. The global era started in the last decade. Commonly, it is expected that the winds of change toward globalization will change the existing systems of international shipping<sup>[1]</sup>.

## 1 Globalization

The expression “Globalization” has acquired significant impressive meanings. Some regard it as a process that is valuable and self-imposing. Globalization includes prospects for actual worldwide progress, but this progress is not equal everywhere. The expression has become prevalent since 1980s, reflecting technological progress that has made it easier and faster to conclude international agreements in all fields. It refers to prolongation beyond national borders. The expression sometimes also refers to the evolution of people, such as labor, and technology across international borders. Hence, it is a term used to describe how human beings are becoming more interrelated around the world economically, politically, culturally, socially and psychologically. Although these links are not new, they are more penetrative than ever before. Finally, Globalization is a natural outcome of the development of the world<sup>[3]</sup>.

## 2 Maritime education and training

Despite the multiplicity of MET definitions, all definitions comprise the following elements:

The procedure within which a candidate becomes conversant with the knowledge, attitudes and skills needed to execute the daily work and different duties of future deck or engineering officers onboard ships, and which empowers them to work in different fields of maritime transport. Such a procedure can provide the candidates with the ability to respond correctly and effectively to emergency situations<sup>[4]</sup>.

A series of interdependent procedures such as teaching, learning, researching and utilizing resources embodying human material and information to carry out special educational and training goals to ensure marine safety, security and the protection environment<sup>[5]</sup>.

### **Maritime education and training and globalization**

The maritime field can be affected by several factors such as international conventions and regulations, flag state parties (the authority), shipping companies which should carry out the authority's regulations, and MET institutions which conform with international conventions and national regulations. Developed countries use advanced technology and ships, whereas the products from developing countries are seafarers. As a result, and because of the shift of seafarers from one continent to another, the problem of nonconformity worsens and ships are not safely operated. So, the solution to this problem is in globalizing MET<sup>[6]</sup>.

Because of the numerous recent radical changes in political, economic and educational concepts, education today, particularly in the maritime field, is undergoing fast and profound changes. Globalization of the shipping industry has a direct impact on the competition for quality in maritime education and training.

Education is speedily becoming globalized; educational subjects are becoming more and more diversified and differentiated. So, the old educational model is no more of use; it has been substituted by a new model. The invasion of globalization has eliminated the borders between educational schools, hence, the educational services have become borderless. Globalization has changed the movements of overseas students seeking education<sup>[7]</sup>.

### **3 Quality assurance**

Quality has become a basic requirement which has global implications. It is a basic access to the criteria system which should be based on measuring and studying the ingredients of those criteria.

Quality is an integrated system which can be specified as a norm or mechanism which can be followed by any organization to enhance and improve its products/ services.

The three vital factors of quality are competitive strategy, the technology required for providing good products and/or services and the procedure to manage the organization<sup>[8]</sup>.

Quality assurance is the procedure which controls the measures in order to minimize deviancy of products or outcomes; it is the process which controls the performance of the whole supply chain<sup>[8]</sup>.

Quality assurance and quality audit provisions are employed in the educational process. Education and training institutes are accustomed to applying for recognition of their qualifications by outside bodies, often across national boundaries. Thus some assurance of standards is feasible, provided they can be usefully incorporated into a system of overall compliance at international level<sup>[9]</sup>.

As regards quality assurance, it should be seen as the first step towards a permanent evolution organism<sup>[10]</sup>.

In MET institutes, the quality assurance procedure defines the structure and regulatory approach to check all management and technical procedures, services and teaching activities. In a word, quality in MET is the path to excellence<sup>[11]</sup>.

### **3.1 Achievement of quality assurance**

To achieve quality assurance in MET in a comprehensive way, every MET institute should include an integrated system to outline the quality levels and their scopes, and provide convenience circumstances in order to achieve these outlines and their objectives. In MET institutes, the quality systems aim to:

Knowing the international standards of quality educational and research services, the provisions and specifications of quality as defined by accreditation bodies.

Continuous auditing and self reforming.

Allocating the procedures and techniques that should be used to reach the international standard of the activities, the educational and research process and interpolate the accredited provisions.

Spreading the concept of the quality assurance culture in MET institutes.

Enhancing activities when presenting educational and research services according to recognized international levels.

The implementation of appropriate techniques to achieve quality management requires the following ingredients:

Clear educational and researching strategy reflecting the universal educational criteria in all educational and research fields.

Correct and universal criteria in taking decisions.

Examining procedures and systems to increase and develop the educational resources and enhance the educational techniques, in addition to improving the courses by using systems of automatically updating information.

The ability to select students and instructors and all educational and research processes according to globalization criteria.

The long-run adherence to continuous improvement in all educational and research processes, activities, procedures and techniques as well as continuous updating the programmes, methods and knowledge resources.

Adopting the concept of “Error Free performance”, i.e., correct performance without error.

Integration of training processes by applying quality management systems.

Adopting the concept of delegating authority with respect to whatever is related to developing educational services.

One of the ways to meet the increasing need for a global quality assurance is to design, implement and maintain quality system based on uniform international criteria. These generic criteria present guidelines for developing quality systems, as well as a set of requirements with which a MET institute should comply in order to register its quality system. The criteria provide a possibility for streamlining university operation, identifying, correcting and preventing quality problems, as well as quality improvement by means of internal quality auditing and various statistical techniques.

### **3.2 The objective of quality assurance and accreditation in met**

Establishing globalized systems in MET institutes of IAMU in order to ensure quality and accreditation.

Spreading awareness of quality culture in these MET institutions.

Preparation of quality graduates who can meet the requirements of the modern era.

Developing international accreditation criteria and measurement mechanisms.

Developing the institutional capability to ensure continuous improvement of educational process.

## **4 STCW convention as an international standard**

The international convention on standard of training, certification and watch keeping for seafarers (STCW), 1978 was adopted in July 1978 and entered into force in April 1984. Since then three amendments thereto were adopted in 1991, 1994, and 1995.

The STCW 95 can be viewed as a response to the lack of success of the STCW 78. It was a trial to define uniform standards of what seafarers should know and what they should be able to do. The convention does not address the issue of critical educational affairs. It sets a minimum global, professional standard for seafarers<sup>[10]</sup>. This professional standard includes skills, knowledge, understanding and the abilities needed to ensure that individuals are capable of fulfilling the role expected from them at sea<sup>[6]</sup>.

It just began the process of harmonizing different national certification systems toward an international agreed system. Although the convention represents an important milestone in MET, because it codified global technical standard for seafarers for the first time and because it created perception of various approaches to MET worldwide<sup>[9]</sup>, it did not define the process to be used for acquiring the competency. Briefly, the convention enumerated and defined certificates at various levels as the eventual product of the MET process without explaining the process it self.

Probably the Convention avoided the direct impact on the national MET system. It avoided determining the duration of education and training and MET entry requirements. Finally, it can be stated that the convention just began the process of harmonizing the certification system and at the same time harmonizing different national MET systems toward an internationally accepted MET system. The STCW convention presents an initiative towards internationally accepted standards<sup>[12]</sup>.

## **5 Proposed unified criteria**

There is an urgent need to radically change the concept of education in the present era of globalization and technological innovations. This could be achieved through developing international uniform criteria for maritime education and training and developing a mechanism for the implementation of quality standards to be applied in all maritime educational institutions. Such standards should be comprehensive, i.e., covering all the aspects of the educational process, and flexible, i.e., could be adapted to suit varying cultural contexts. The process of developing such

standards should be based on concepts and principles which reflect the expected future developments in maritime education, e.g., utilizing whatever is technologically innovated, meeting the requirements of the increasing diversity of sources of knowledge and information, and the need to acquire new skills, in addition to the development of management techniques with a view to solving problems and taking the proper decision.

It should be noted that these criteria applied for certain periods and tested so that their outcome may be assessed.

### **5.1 The documents relating to global educational criteria**

The criteria and indicators could be grouped under five major domains representing the aspects of the educational process. These criteria should function as reference to assess all the aspects of the educational process and self-assessment. These criteria are:

The criteria document of the maritime institute; it includes the vision and mission of the institute, the social environment prevailing in the institute, vocational development, quality assurance, and checking non-conformities.

The document of instructor criteria; it includes the following fields: planning, education and management strategies, the courses, assessment, and instructor's professionalism.

The document of excellent management criteria; it includes its cultural institutional domains, vocational participation, and change tool.

The document of the criteria of society's participation; it includes maritime community service and pooling its resources.

The document of curriculum criteria and learning outputs and the basic fields of skills: cognition skills and personal traits.

Each of these five domains has its own specifications, conditions, and fields, together with its development aspects and measurement units which are used to measure the quality of this domain.

Within the context of this paper, reference is made to the criteria of successful maritime institutes and the criteria of the productive teacher.

With respect to the successful maritime institute, five domains are identified:

The first domain: the vision and mission of the maritime institute.

The second domain: the social environment of the maritime institute.

The third domain: ongoing vocational development.

The fourth domain: the learning community.

The fifth domain: quality assurance and checking non-conformities.

Each of the above domains has its own criteria which are based on several quantitative and qualitative indicators.

With respect to the criteria of the instructor, who is considered the pivot of the learning process,

today's instructors should have the following characteristics. He should be an educator, planner, contemplator, thinker, assessor, and definitely a leader. The nature of the modern era and the challenges of globalization require certain types of instructors who are highly efficient at the academic, professional, cultural and ethical levels. Only such instructors are capable of effecting change and inculcating in their students the skills of innovative thinking. This also requires a type of management that is aware of the changing nature of the maritime community. In addition, the performance of the instructor should be improved, which could be realized by setting planning, educational and training criteria for his performance. His promotion should be determined on the basis of the level of performance, experience and training he has achieved and the researches he has conducted, together with his qualifications.

The domains and criteria of the instructor are:

The domain of planning, the most important criterion of which is determining the students' educational requirements.

The domain of education and class management criteria which pertains to facilitating the process of learning and increasing the students' participation in the learning process by engaging them in problem solving and creative thinking.

The domain of courses, the most important criterion of which is improving the capability to develop courses.

The domain of assessment, the most important criterion of which is self-assessment by the students.

The domain of the instructor's professionalism, the most important criteria of which are enhancing the ethics of the profession and professional development.

## **5.2 The pivots of the criteria are**

The criteria of students' admission and assessment on the bases of skills, capabilities and excellence.

The criteria of new instructors selection.

The criteria of academic supervision.

The criteria of selecting leaders.

The criteria pertaining to quality organizations with respect to autonomy, objectivity, mechanics, financing and the bases of application.

With respect to criteria, consideration should be given to the following:

Defining and unifying the terms used in the project of global uniform criteria.

Revising the structure and classification of local criteria with a view to abiding by the global uniform criteria.

Reconsideration of local criteria to ensure their compliance with the concepts and principles embodied in the global uniform criteria.

Developing the mechanics of implementing the global uniform criteria by setting short and long-term plans which take into consideration the actual educational potentialities of each country with respect to material and financial resources. This is to be supplemented by spreading awareness of gradual application of the criteria.

Viewing the five domains of the global uniform criteria as an integrated system.

Reducing the number of the criteria to facilitate their application.

Setting the mechanics of developing the preparation of instructors who can appreciate and apply the criteria.

## 6 The role of IAMU

It is necessary to establish follow-up committees to monitor and assess the performance of the maritime institutes members of the Association. Care should be given to global communication between maritime institutes. Communication skills are based on developing dialogue skills which, in turn, depend on:

Exchange of information and knowledge.

Encouraging innovation.

Encouraging team thinking.

IAMU needs to be prepared to provide a vital link in developing a network of maritime institutes to ensure consistency in global standard. IAMU has a vital role to play in the endeavour to support globalization. This network of branches spanning every continent enhances international cooperation and collaboration effort<sup>[9]</sup>.

IAMU should undertake the task of ensuring that the institutes members of MET have a responsibility to deliver quality courses that meet the required globalization of shipping industry<sup>[13]</sup>.

IAMU has to set up the fundamental requirements of certification of graduates of maritime institutes<sup>[14]</sup>.

We can observe from the progress of the compactation of mixed crewing environment on the majority of the world fleet today and from the international confederation of many shipping companies that the globalization of the shipping industry is more speedily developing than other industries. So, I believe that we are in era of globalization and rivalry of MET institutes. IAMU is invited to enhance, encourage and develop research within three working group:

Working Group 1: Maritime Education and Training.

Working Group 2: Safety Management System.

Working Group 3: Global Standardization<sup>[15]</sup>.

IAMU members are invited to work in close cooperation with IMO and WMU in developing the worldwide database and databank as an important step towards the harmonization of MET system



globally.<sup>[6]</sup>

## 7 Conclusion

In the past three decades international shipping underwelled radical changes and the global era started in the last decade. Globalization is a natural outcome of process of development. Globalization of shipping industry has a direct impact on the competition for quality in MET. Quality assurance in MET is the path to excellence. The radical changes the concept of education in the present era of globalization could be achieved through developing international criteria for MET and developing mechanism for the implementation of quality standards. It is necessary to establish follow up committees to monitor and assess the performance of maritime institutes members of IAMU.

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