

## **The Effect of The Use of Information Technology and Foreign Language Communications in The Teaching Process on The Quality of Indonesian Seafarers**

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### **Abstract**

This study aims to determine the use of information technology in the teaching process on the quality of Indonesian seafarers, to determine the level of foreign language communication skills on the quality of Indonesian seafarers. The results of this study indicate that the use of Information Technology in the teaching process shows a positive and significant relationship with the statistical test results recorded at 47.7%. That foreign language communication in the teaching process on the quality of Indonesian seafarers is quite positive and significant, with the results of statistical tests recording 36.1%. The combined effect of the use of Information Technology and English Communication in the teaching process on the quality of Indonesian seafarers is obtained from the R square number of 0.615 or 61.5% and the remaining 38.5% is influenced by other factors or other variables. The quality of seafarers which is influenced by 2 independent variables of Information Technology use and English Communication can also be seen from the sig. indicator value 0,000.

**Keywords:** Information Technology, Foreign Languages, Quality of Seafarers

### **1. Introduction**

Knowing from the history of the work of seafarers, the definition of a seafarer is a person who works on a ship, both tanker, cargo ship or passenger ship. The ocean is the main component of the planet's hydrosphere which covers 71 percent of the earth's surface, with an area larger than the land, of course, the profession as a seafarer will sail around the world.

It is very desirable to have a job around the world, but this is a problem if it is not balanced with foreign language skills, such as English as international language and the ability to use Information Technology in the industrial revolution 4.0

Education and training of prospective seafarers in the country need strengthening, especially in the field of mastery of English and Information Technology (IT). Technically, Indonesian seafarers are quite good, especially officers or executive officers on board, because from the beginning they are prepared to become professional seafaring officers. However, for cadets, the English proficiency rating is still considered low, with different backgrounds and abilities, and generally departing from the lowest level or ordinary crew (ABK). Likewise, prospective cadets who are still attending education, their English language skills are still below standard. Therefore, especially language skills need to be improved so that they are comparable to their partners, especially sailors from the Philippines or other ASEAN countries who have made English as their second language.

The challenges in the maritime sector in the future are getting heavier and more varied. Services to the users in this sector are increasingly heavy and varied. This includes being able to operate computer-based facilities and equipment. As a candidate for officer on board this is very important. The success of the officers on board will be largely determined by the ability and expertise to face and solve problems in the field. In these conditions, technical skills as a seafarer need to be supported by other abilities such as mastery in IT operations and international languages, especially English.

The process of introducing Information Technology and English Communication in the teaching and learning process for cadets is the right and good step. Basic knowledge of these two aspects is very important in the world of work. Therefore, the provision of these two materials is very important for students. The problem is, of course, besides the facilities and infrastructure, it must also be supported by student knowledge and understanding, so that there is no miscommunication in learning.

In the marine education curriculum, especially the BPSDM Transportation, which is under the Ministry of Transportation, has been revised according to the dynamics and needs of the times. English and IT courses are given and tested every semester. In addition, there are still other efforts to train and strengthen cadets' English skills, such as bringing in native speakers, English extracurricular activities and others.

English is a vital means of communication for seafarers while working on board. Especially if they sail on foreign ships. It is imperative to master English for deck and engine cadets. If they have no ability in English, there will be miscommunication and even not being able to do the job properly and correctly while on the vessel because they do not know what the orders are.

Based on the above background, the problem formulation of this research is how the effect of the use of information technology on the quality of STIP Jakarta cadets, how is the mastery of foreign language communication on the quality of STIP Jakarta cadets and how is the influence of the use of information technology and mastery of foreign language communication on quality cadets of STIP Jakarta. Based on the formulation of the problem above, the objectives to be achieved in this study are to determine the effect of using information technology on the quality of STIP Jakarta cadets, to determine the effect of mastery foreign language communication on the quality of STIP Jakarta cadets and to determine the effect of the use of information technology use and mastery of foreign language communication on the quality of STIP Jakarta cadets. The theoretical benefit of this research is expected to be a means of information and reference for the management of the teaching system, especially regarding the subject of using information technology and foreign language communication in the teaching process in class at STIP Jakarta. The practical benefit is expected to provide benefits in strengthening the mastery of foreign language communication and information technology, especially for cadets of STIP Jakarta.

## **2. Research Method**

### **2.1. Research Approach and Design**

#### **2.1.1 Research Approach**

This research includes deductive research using a quantitative approach, namely research to examine facts, theoretical and empirical studies related to the object to be studied.

assdd the intended correlation design to see the effect between the independent variables, Use of Information Technology (X1) and Foreign Language Communication

(X2) with the dependent variable Seafarer Quality (Y), for more details, the following research design:

## 2.2. Population and Sample

### 2.2.1 Population

The definition of population is something that becomes the target of research in an effort to obtain information and draw conclusions. The population of this study were all 104 cadets of STIP Jakarta.

### 2.2.2 Samples

The sample size is determined by taking 25% of the total population, taking 20% of the sample size in line with the opinion of Suharsimi, Arikunto (2007) that: ... if there are less than 100 people, it is better to take all of them so that the research is a population study [2]. Furthermore, if the number of subjects is large, it can be taken between 10-15% or 20-24% of the population. In this study, the number of samples was 83 people (still participating in data processing).

## 2.3. Data Collection Techniques

The data collection technique used was a questionnaire. A questionnaire is a list of questions that are used to obtain data and information from respondents. The questions are arranged in such a way based on existing indicators.

## 2.4. Data Analysis Techniques

The method used in this research is quantitative descriptive. The sample consisting of 83 respondents, was selected by means of the accidental sampling technique. The technique is a type of nonprobability or non-random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study [17]. It is also referred to the researching subjects of the population that are easily accessible to the researcher [7]. Convenience samples are sometimes regarded as 'accidental samples' because elements may be selected in the sample simply as they just happen to be situated. The respondents were the student's who were identified proper to fill the questionnaires. The data were collected through questionnaires.

To answer the problems in this study, the data analysis techniques used were statistical regression analysis techniques. With the following research instruments:

Table 1. Research Instruments

	Independent Variable		Dependent Variabel
	(X1)	(X2)	(Y)
Indicator	Use of Information Technology	Foreign Language Communication	Seafarer Quality
	1. Instructional methods and models	1. The instructor's ability of Teaching	1. Understanding of IT
	2. Efficiency and Effectiveness	2. Teaching Approach (Communication)	2. Attitude after being educated
	3. Materials and Equipment	3. Expediency	3. English Skill Improvement
	4. Benefit of Using IT		

According to Sugiyono (2012), research instruments are used to take measurements with the aim of producing accurate quantitative data, so each instrument must have a scale [14]. The scale used by researchers is an ordinal scale.

Table 2. Scale of Measure

Statement	Scale of Measure				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Positive Statement	5	4	3	2	1
Negative Statement	4	3	2	1	5

### 3. Results and Analysis

#### 3.1. Theory

##### 3.1.1. Information Technology

The development of human civilization is accompanied by development how to convey information, hereinafter known as (Information Technology). According to Bambang Warsita (2008: 135) information technology is a means and infrastructure (hardware, software, useware) systems and methods for obtaining, transmitting, processing, interpreting, storing, organizing, and using data meaningfully. The thing that the same is also expressed by Lantip and Rianto (2011: 4) information technology is defined as knowledge in the field of information computer-based and its development is very fast. Hamzah B. Uno and Nina Lamatenggo (2011: 57) also suggest technology information is a technology used to process data.

Processing includes obtaining, compiling, storing, manipulating data in various ways to produce quality information, namely relevant, accurate, and timely information.

From the opinions of the experts above, it can be concluded that information technology is a technology in the form (hardware, software, use ware) that is used to obtain, transmit, process, interpret, store, organize, and use data meaningfully to obtain qualified information.

According to Abdulhak (2005: 413) there is a classification of the use of Information and Communication of Technology (ICT) into three types, namely: first, ICT as a medium (aids) for education, namely only as a complement to clarify the descriptions presented. Second, ICT as a source, namely as a source of information and seeking information. Third, ICT as a learning system.

According to Bambang Warsita (2008: 150), in general there are three uses of information technology or instructional computers and the internet for education and learning, namely: First, Learning about computers and the internet, computers can be used as learning objects, for example computer science (computer science). Second, Learning with computers and the internet, which is information technology to facilitate learning in accordance with the applicable curriculum in schools. For example telecommunication center, Nation Education Department, Development of interactive multimedia CD programs for subjects. Third, learning through computers and the internet, which integrates skills development based on ICT (Information Communication and Technology) with applications in the curriculum. For example, in college, students doing online research, use spreadsheets and program databases to help organize and analyze data that has been collected or use word processors to compile research reports.

Forms of use / utilization of information technology are 1) Tutorial, is a program in which the delivery of the material is done in a tutorial. It is a concept that presented with

text, still or moving images, and graphics; 2) Practice (drill) is to train students so that they have proficiency in a skill or strengthen the mastery of a concept. This program usually provides a series of questions; 3) Simulation, this format aims to simulate an event that has occurred or has not occurred and is usually associated with a risk, such as an airplane crashing, a catastrophe and so on; 4) Experiment, this format is similar to the stimulation format, but is more aimed at experimental activities, such as practicum activities in the Science, Biology or Chemistry laboratory; 5) Game, which refers to the learning process and with this formatted multimedia program which is expected that learning activities can be done while playing.

From the various opinions above, it can be concluded that the benefits of IT are as follows: first, IT as a source means that IT can be used as a source of information and to find the information that will be needed. Second, IT as a medium, as a tool that facilitates the delivery of information so that it can be accepted and understood easily. Third, IT as a development of learning skills, skills development based on information technology with applications in the curriculum.

Utilization of Information Technology as a Learning Source. The term utilization comes from the word forage or use and gets the affix word for it. According to Bambang Warsita (2008: 37) utilization is the act of using instructional methods and models, materials and equipment to enhance the learning atmosphere. The same thing was conveyed by Seel and Richey (2005: 50) that utilization is an activity using processes and resources for learning. So it can be concluded that the use of learning resources is the process of utilizing learning resources in order to achieve the desired goals. If it is related to IT, it can be understood that utilization as a learning resource is to use IT to assist in learning or serve as an alternative source of learning.

In the field of education, especially among universities, IT is very helpful for students in finding learning resources. Learning resources according to Wina Sanjaya (2010: 174) are anything that can be used by students to study materials and learning experiences in accordance with the objectives to be achieved. According to Jamal M.A (2011: 152-160), there are ten roles of ICT as a learning resource, those are: First, the Source of Knowledge, is to integrate all learning reference centers on earth. For example, a person can access library sites in universities in other countries in order to find the required references, can search for the best materials and obtain sample case studies via the internet. Second, the Learning Meeting Place, various ICT facilities and applications such as email, mailing lists, chatting and blogging that can function as a place to discuss, interact and exchange ideas without having to leave their seats. Third, Generating Initiatives in Teaching and Learning Activities, a process of digitizing educational resources and the educational process has given birth to various initiatives in the implementation of teaching and learning activities. For example, by using the internet, a student can learn using e-learning, e-library, e-research and e-conference. Fourth, Support Tools for Overcoming the Limitations of five senses, which can be used as a support for teachers and students to overcome the limitations of the senses in absorbing, processing, conveying and implementing various knowledge into learning objects, for example with the help of using animation downloaded from the internet a teacher can illustrate how the system is human circulation occurs.

Fifth, an integral part of the curriculum framework, is a component or an inseparable part of the curriculum framework and the teaching and learning approach methods that are developed. One of the competency-based learning strategies is to implement a variety of component. Sixth, balancing individual learning styles, is a tool for

a variety of teachers and students, customizing teaching materials and learning approaches to be more effective. In this context, every student is welcome and it is possible to tailor made their own references and teaching materials. Seventh, management of educational institutions, which leads to elements of management of educational institutions, such as schools and campuses. ICT as a supporting technology for operational management of educational institutions so that the processing of various available resources can occur effectively, efficiently, optimally and well. Eighth, management of educational institutions, which is intended for institutional leaders and managers as the highest authority in decision making. Through the application such as MIS (Management Information System), DSS (Decision Support System), TIS (Transactional Information System), data warehouses, dashboards, etc. Ninth, Becoming an Important Infrastructure for Educational Institutions, ICT must be able to become one of the important infrastructures owned by educational institutions. In this regard, a school or campus must have a data transmission connection by connecting directly to infrastructure, telecommunications, either via terrestrial lines, submarine cables or satellites.

Tenth, transforming educational institutions into centers of excellence for roles, is to transform educational institutions that have implemented part or all of these ICT roles into a center of excellence for institutions.

Of the ten roles of ICT as a learning resource, there are 3 of the most dominant roles for the use of IT as a learning resource. These roles include:

- a. Source of Science
- b. Supporting Tools to Overcome the Limitations of the Senses
- c. Balancing Individual Learning Styles

The three roles of ICT are very helpful for students in the learning process, especially as a learning resource. ICT through the Internet network can integrate all existing knowledge on earth for easy access, students can access materials / references and obtain case study examples to study. In addition, ICT can also overcome the limitations of the senses in absorbing, processing, conveying, concluding and implementing. In this case, the role of ICT is as a medium used by students to more easily understand and illustrate materials that are difficult to learn. ICT is also a tool for tailor-made references and teaching materials. ICT provides a choice of flexible and adaptive learning methods, such as the action learning method.

### **3.1.2. English Communication in Teaching and Learning Process**

#### **3.1.2.1. Principles of Learning English**

In essence, language including English is a tool for communication among citizens. Communicating means expressing information, thoughts and feelings. Communication activities are manifested in the act of understanding and expressing nuances of meaning both through oral and written media which are influenced, among others, by the situation, the people involved in the communication, the topics, the psychological conditions of the people involved in the communication. Through language as the main means of communication, especially through English as a global language, we can develop science, technology, and culture by using this language. In the context of education, this language serves as a means of communication in order to access, store and share information. In everyday life, it functions as a tool for establishing interpersonal relationships, exchanging information and enjoying the beautiful aspects of language. (see English Subject Curriculum 2004).

Based on its function, the objectives of teaching English Subjects in the current curriculum include:

(1) Developing the ability to communicate in that language, both oral and written. These skills include listening (listening), speaking (speaking), reading (reading), and writing (writing);

(2) To raise awareness of the essence and importance of English as a foreign language to become the main learning tool; develop an understanding of the relationship between language and culture and broaden cultural horizons. Thus students have cross-cultural insight and involve themselves in cultural diversity.

To achieve the objectives of teaching English Subjects, it is necessary to have interrelationships between components in the curriculum, namely the objectives of teaching in the current curriculum context and in line with the content standards stipulated in Government Regulation No: 19, expressed in the form of standard competency formulations and basic competencies which are then formulated. Specifically, in the form of indicators that are used as consideration in selecting and developing other curriculum components.

### **3.1.2.2. Communicative Approach in Learning English**

In the competency-based English curriculum, the approach to teaching English used is the communicative approach or what is known as the meaningful approach. The purpose of this communicative approach is to train students to be able to use the target language according to the student's skills and level. The communicative approach in language teaching focuses on active communication between speakers and listeners, writers and readers or creates active interactions between the two.

Many experts have provided a definition of the meaning of a communicative approach. They also give other names about communicative approach such as 'Meaningful approach' in the 1994 English curriculum, constructivist approach or cooperative approach. But all of these terms are referring to a communicative relationship in language learning. The point is that the principle of communication is that people speak or write with the intention of communicating something to others as suggested by Mey (2000: 68). "That people talk with the intention to communicate something to somebody; this is the foundation of all linguistic behavior. Meanwhile, Gray (1990) said that:

*A communicative approach is: ... on meaningful social interaction achieved through a series of communicative activities that are evaluated in terms of their communicative effectiveness rather than their grammatical accuracy.*

In such communication, what is prioritized is mutual understanding between the two parties by carrying out meaningful social interactions through effective communication activities with an emphasis on meaning and not on grammar. However, at a higher level, the accuracy or accuracy of the use of grammar can also reflect effective and efficient communication skills.

According to Kridalaksana in Kasihani (2001: 2) that communicative competence is the skills of a linguist to use language socially that is acceptable and adequate. Meanwhile, Rivers in Kasihani (2001: 2) defines a skill to function in a truly communicative setting, namely in a spontaneous transaction involving more than a person. Whereas Grow (1987: 1) says that the communicative approach is a comprehensive teaching approach.

From these various definitions, it can be concluded that the term communicative approach is communication skills. These skills according to Nababan (1991: 3) contain

elements 1) Language is a means of communication, and 2) That the goal of learning language is the ability to communicate.

Learning activities using a communicative approach can be studied in real situations where there is an exchange of messages as expressed by Medgyes in Rossner and Bolitho (1990: 105), 'Communicative approach that the foreign language can be learned only in real communication situation where real messages are exchanged. Meanwhile, Richard (1990: 51) states that "communication largely consists of the use of language conventional ways". Furthermore, Cunningsworth (1984: 43) suggests that being able to communicate effectively in English must involve a variety of language skills.

Based on the opinions, ideas and definitions mentioned above, it can be concluded that the communicative approach is a language teaching method that emphasizes the essence active interaction between the speaker and the listener or the writer and the reader. So people talk with the intention of communicating something to others which is mentioned by Mey (2000: 68). as a principle of communication.

In communication, speakers and listeners actively interact naturally, so that communication between the two runs effectively and efficiently. However, there may be communications that are deliberately created according to conditions and situations.

Rivers and Templey (1978) in Ahmad (mimeo) added that the communication learning process contains a series of stages: 1) Skills provision, and 2) Skills use. Meanwhile, Kaswanti (1990: 4) mentioned that the salient feature of the communicative approach is the change in the direction of attention in language teaching, namely attention to students as a learner centered point. As a result, a lot of research on the learning process and the process of mastering language occurs in oneself.

In language teaching, for example; teaching materials, when viewed from a pragmatic perspective, there are a number of communicative functions that can be simplified into several categories, including: Van EK (1980) lists six kinds of communicative functions, Finocchiaro has five, and Wilkins (1973,1976) has eight types (Kaswanti 1990: 4). Furthermore, Kaswanti said that in the communicative function there are a number of language acts such as: asking questions, offering suggestions, rejecting invitations, expressing pleasure, and so on.

Thus it can be said that in the communicative approach the priority is the relationship of the two parties involved in accordance with the context, situation, feelings (mood) during the communication. The emergence of feelings in communication will certainly increase the activity of the communication process. Without the communication aspects mentioned above, it will be difficult to expect normal communication interactions to occur.

Communication using the target language cannot be separated from one language skill to another, but must be closely related to one another. The closeness of the relationship between the four language skills and other language elements in various situations of interaction in language teaching is also called integrated skills. The four language skills are taught in an integrated manner and are not taught separately. For example, in teaching listening, it is not only possible to teach these skills alone, but inevitably other skills such as speaking are carried over. So, teaching listening, speaking or writing is involved in it, so that communication with these languages can be actively carried out.

In addition, in communicative language teaching, we also emphasize the need to know grammar rules and be able to use them effectively and appropriately. Nunan (1989: 12) emphasizes that we need to know various forms of grammar and be able to use them



effectively and appropriately when we communicate. In this regard, something we do in the classroom needs to be supported by beliefs about language rules and how to learn language and its application in communication.

In addition to combining the four skills, as previously described, the skills, needs and psychological factors and characteristics of students also need to be considered. Rossner and Bolitho (1990: 96) also emphasize the importance of seeing the needs of students in communicative language teaching. The four things are: 1) find out what the learner needs to know, 2) find out what he / she knows already, 3) abstract the second from the first, and 4) teach it. This is also said by Medgyes in Rossner and Bolitho (1990: 104-105) about the principles that communicative teachers (Communicative teachers) have extra skills, are multi-dimensional, master technology, and make students the center of learning, independent of textbooks, and able to stimulate students.

According with Medgyes beliefs that place students as learning centers for communicative teachers. Nunan (1991: 178) suggested that the approach should be based on the belief that students bring different attitudes and experiences that must be considered in the teaching and learning process in the classroom.

Based on the views and opinions of linguist and education experts above, it can be said that the consequence of language teaching is that there must be interaction between language speakers and listeners or language writers with readers, so that both can interact actively. Communication between them is carried out using the four language skills in an integrated manner, and is tailored to the situation and needs of them. Therefore, Nunan (1991: 178) views that language learners will bring attitudes and habits, and this is a consideration in language teaching and learning, especially English.

### **3.1.3. Indonesian Seafarer Quality**

#### **3.1.3.1. Definition of Quality**

Quality is defined by the British Standard Institution as a totality of the features and characteristics of a product or service that refers to its ability to satisfy related parties who need it (Sudha, 2013: 123). There are 5 main groups of qualities defined by Garvin: (1) Transcendent definitions / subjective and personal; (2) Product-based definition / based on products that can be seen; (3) User-based definition / customer satisfaction; (4) Manufacturing-based definitions / meeting specifications; (5) Value-based definitions / quality related to costs (Sudha, 2013: 123). Another definition from quality experts such as Crosby and Ishikawa defines quality as conformance to requirements and quality also means customer satisfaction (Suardi, 2001).

Quality was originally developed in the production of goods. However, at present it has also been applied to the production of services including in the world of education, although as stated above that measuring is not an easy thing. Based on previous research, measuring the quality of education can be done by looking at the following dimensions (Owlia and Aspinwall in Sudha, 2013: 126):

- a. Product dimensions include: performance, features, reliability, conformance, durability, and serviceability.
- b. Dimensions of software quality include: correctness, reliability, efficiency, integrity, usability, maintainability, testability, expandability, and portability.
- c. The dimensions of service quality include: responsiveness, reliability, understanding customers, access, competence, courtesy, communication, credibility, security, tangible, performance, and completeness.

This study will assess the quality of education and skills training for seafarers using the TQM in Education approach. TQM is a philosophy that emphasizes the 3 principles to achieve a high level of process performance and quality. The three principles are customer satisfaction, staff / employee involvement, and continuous improvement in performance. Customer satisfaction includes conformance to specifications, value, fitness for use, support, and psychological impressions. Staff / employee involvement includes cultural change and teams. Continuous improvements include getting started and problem-solving processes (Krajewski et.al, 2007: 200). TQM is the development and continuation of quality assurance in the hierarchy of quality concepts. TQM is concerned with creating a quality culture, which encourages all staff members to satisfy customers. This concept talks about how to give customers what they want, as well as when and how they want it. This concept is able to adapt to changing expectations and customer styles by designing products and services that meet and satisfy their expectations (Sallis, 2010: 59).

The concept of TQM, which was initially applied to be more popular in industry, is now also being applied in educational settings. The application of TQM in education is considered appropriate because educational institutions have the obligation to provide various learning methods according to the needs of each student, which must have differences from one another (Sallis, 2010: 86). Previous research related to the application of TQM in education explains that the pillars support TQM in Education are as follows (Jayakumaran, 2011: 149):

- a. A synergistic relationship between education providers and students;
- b. Total dedication to continuous improvement and self-evaluation, individually and collectively;
- c. Recognition that an educational organization or institution is a system and each job is seen as part of a stage / step of an ongoing series of processes;
- d. The success of implementation is influenced by the strengths and responsibilities of the leadership / top management. According to this research, TQM can be applied in various fields of education, including business and economics, operations management, business policy and strategy, financial management, corporate finance, financial accounting and auditing systems, human resource management, organizational behavior, system information tools, mathematics / statistics, professional education, and engineering.

### **3.1.3.2. Definition of Seafarers**

A seafarer is a person who works on board as part of its crew, and can work in one of a number of different fields related to ship operation and maintenance. (Big Indonesian Dictionary, 2004). This includes all persons working on board. In addition, they are often referred to as crew members or ABK. To be able to work on a vessel, a sailor must have a special certificate issued by the maritime education and training agency.

Seafarer is any person who has a qualification of expertise or skills as a vessel crew (Article 1 Paragraph 3 PP No. 7/2000 concerning Maritime Affairs).

The seafaring profession has been around for a long time, and the term seafarer has its etymological origins at a time when sailing had been the primary mode of transportation at sea since time immemorial. But now this term refers to any person who works on any type of ship as a mode of transportation, and includes people who operate ships in a professional or recreational manner, be it for a military navy or a merchant vessel.

### 3.1.3.3. Seafarers' Skills Certification Quality

Seafarers' skills certification is a form of education and training which is carried out by following the Quality Standard System (QSS) which has been stipulated in the Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 70 of 2013 concerning Education and Training, Certification and the Seafarers' Guard Service. This regulation clearly states that the implementation of maritime training, both skills and skills training, must meet the Indonesian Maritime Quality Standard System which refers to the National Education Standards and the 1978 STCW International Convention and its amendments. The education and training institution must receive approval / approval after the implementation of an audit of 8 standards covering educational facilities, education and education, management, financing, graduation competencies, content, process, and educational assessment.

If you want to assess the quality of education and training institutions based on compliance with applicable regulations, the results are almost certainly good because education and training institutions that have an Approval are still being monitored by the National Committee for Marine Quality Supervision of Indonesia, supervised by the Transportation Human Resources Development Agency, and are evaluated periodically by the Directorate General of Sea Transportation at least once a year. However, the question is what about quality based on customer perceptions. Therefore, this study seeks to reveal the quality of the implementation of skills certification held by training institutions using the TQM approach that promotes customer satisfaction. This study uses a conceptual framework that includes 6 criteria.

Tabel 3. Quality Dimensions in Education

<i>Dimensions</i>	<i>Characteristics</i>
<i>Tangible</i>	<i>Sufficient equipment/ facilities Ease of access Visually appealing environment Support services (accommodation, sports, etc)</i>
<i>Competence</i>	<i>Sufficient staff (Academic) Theoretical and practical knowledge, qualifications Teaching experience, communication</i>
<i>Attitude</i>	<i>Understanding students needs Willingness to help Availability for guidance and advice Giving personal attention</i>
<i>Content</i>	<i>Relevance of curriculum to the future jobs of the students Communication skills and team work Flexibility of knowledge, being cross-disciplinary Containing of primary knowledge/ skills</i>
<i>Delivery</i>	<i>Effective presentation Sequencing, timeliness Consistency, fairness of examinations Feedback from students</i>
<i>Reliability</i>	<i>Trustworthiness Giving valid award Handling complaints, solving problems</i>

Source : Owlia and Aspinwall in Sudha (2013 : 127)

#### **3.1.3.4.Previous Researchers**

Haris Budiman (2017), in the journal *Islamic Education Al-Tadzkiyyah*, Volume 8, No.1, Hal 31-43, P.ISSN: 20869118 - 43, E.ISSN: 2528-2476 [8]. Research Title *The Role of Information and Communication Technology in Education*. There is an equation of one research variable, namely Information Technology. The results of the study aimed to determine the role of information and communication technology in education. In general, information and communication technology aims to make students understand information and communication technology devices in general, including computers (literacy) and information literacy, which means that students recognize the terms used in information and communication technology. In the Qur'an there are so many commands, statements, suggestions, satires and so on that substantially connect Islamic teachings with science and technology. The results of this study found that the role of information technology in education, apart from helping students in learning also has an influential role for teachers, especially in the use of facilities to enrich teaching abilities, and the Qur'an as a guideline and guide for the development of science and technology in order to strengthen faith and improve human welfare.

IA Yani, IA Ratnamulyani, AA Kusumadinata (2018), in the journal *Komunikatio* Volume 4 Number 1, April 2018 pp 1-11 [9]. Research title *The Influence of Foreign Language Competence and Organizing in Supporting Career in Public Relations*. There is one research variable equation that is foreign language. The results of the study focus on foreign language skills that can support a career in public relations with foreign language skills. There will be many opportunities to get good jobs in multinational companies and to expand relationships in the international world because foreign languages are generally useful languages to be able to compete in the international world globalization era. This study aims to (1) describe how the influence of foreign language competence can support careers in the field of public relations. (2) To describe the influence of public relations organizers to support a career in public relations. (3) to analyze the influence between foreign language skills and the ability to organize public relations on public relations tasks. This research uses quantitative research methods. The result of this research is that foreign language skills can support a career in the field of public relations and organizing in foreign languages can establish good relationships with various communities, customers from various companies or organizations.

Yusri (2016), in *ILKOM Scientific Journal*, Volume 8 Number 1 (April 2016), pp. 49-56 [16]. Title *The Use of Information and Communication Technology (ICT) Media with the Achievement of Learning English for Class X Students at SMAN I Dekai, Yahukimo Regency*. There are two variables in common, namely Information Technology and English. This study aims to determine the use of Information Communication Technology media for students, to determine the level of mastery of Information Technology Communication media for educators in motivating students and to determine the relationship between the use of Information Communication Technology media with the learning motivation of class X SMAN I Dekai Yahukimo Regency. The results showed that the use of Information Communication Technology (ICT) students was in the high category. (66.67%). This means that the use of ICT has enormous benefits for increasing the mastery of internet media for educators in motivating class X students of SMAN I Dekai, Yahukimo Regency. That the level of achievement in learning English for students is in the high category. (53.34%) means that all this time the increase in mastery of internet media for educators in motivating students of class X SMAN I Dekai Yahukimo Regency is with the passion, enthusiasm, and desire to study the Information Communication

Technology media. The use of ICT has a strong relationship with increasing mastery of internet media for educators in motivating students. This is indicated by the correlation coefficient value  $R = 0.861$  (close to the value of number 1). This means that the more exposed to the use of ICT in English subjects, the stronger the increase in mastery of internet media for educators in motivating the X grade students of SMAN I Dekai, Yahukimo Regency. Keywords: Benefits of ICT Media, Learning Achievement

## 3.2. Results

### 3.2.1. Description of Data

The use of Information Technology and Foreign Language Communication in the teaching process on the quality of Indonesian seafarers. If you look at the results of the respondents' answers, it can be said that the use of Information Technology and foreign language communication on the quality of seafarers is very good. This is indicated by more than 50% of respondents gave agreeing answer to the use of information technology and foreign language communication in the teaching process on the quality of Indonesian seafarers.

The quality of Indonesian seafarers in a learning process results in an increase in the use of information technology and foreign language communication. Then the researcher will tabulate the answers according to the questions given to the Jakarta STIP cadets, as follows:

Table 4. Statistical data distribution

Variable	Pertanyaan	SA	A	N	D	SD
Quality of Seafarer (Y)	1. I understand more about IT, especially in the maritime sector	1.2 %	1.2 %	22.9 %	44.6 %	30.1 %
	2. The use of IT in the teaching sector adds new insights, especially in the maritime sector	0	0	7.2 %	55.4 %	37.3 %
	3. I have become more respectful towards the use of information technology	0	0	7.2 %	54.2 %	38.6 %
	4. My English skills are getting better	0	0	13.4 %	53.7 %	32.9 %
	5. My English communication is getting better	0	0	15.7 %	48.2 %	36.1 %
	Average	0.24 %	0.24 %	13.28 %	51.22 %	35 %
Use of Information Technology (X1)	6. Instructional methods and models using IT are good enough	1.2 %	1.2 %	21.7 %	50.6 %	25.3 %
	7. I think the use of IT in teaching and learning is more effective and efficient	0	3.6 %	15.7 %	43.4 %	37.3 %
	8. In my opinion, materials and equipment are sufficient in the teaching and learning process	1.2 %	3.6 %	15.7 %	45.8 %	33.7 %

	9.	I think the use of IT in the teaching and learning process provides new insights both in the classroom and knowledge about IT itself.	0	0	8.4 %	57.8 %	33.7 %
	10	In my opinion, there are many benefits of using IT in the teaching and learning process	0	1.2 %	4.8 %	50.6 %	43.4 %
		Average	0.48 %	1.92 %	13.26 %	49.64 %	34.68 %
English Communica tions (X2)	11	I think the instructor's ability to teach is good enough	0	0	18.1%	49.4 %	32.5 %
	12	I think the teaching approach using English is more difficult but more useful	1.2 %	0	18.1 %	54.2 %	26.5 %
	13	In my opinion, at first the approach in the teaching process was less communicative but over time it became accustomed and became more understanding.	0	0	12%	65.1 %	22.9 %
	14	English communication in the teaching and learning process has many benefits.	0	0	4.8 %	57.8 %	37.3 %
	15	English communication in the teaching and learning process is useful to improve English skills.	0	0	4.9 %	42.7 %	52.4 %
		Average	0.24 %	0	11.58 %	53.84 %	34.32 %

At the table above, it shows that from the 83 respondents in this study, each of them had alternative answers in answering questions about the effect of using information technology and foreign language communication in the teaching process on the quality of Indonesian seafarers.

it can be seen that the average respondent agrees with the use of information technology in the teaching process of 49.64%, then the average respondent agrees with foreign language communication in the teaching process of 53.84%. Greater average of the use of information technology. And the average quality of Indonesian seafarers is influenced by the use of information technology and foreign language communication by 51.22%.

The indicators used to measure the influence of the dependent variable (Y) on the quality of Indonesian seafarers and the independent variable on the use of information technology and foreign language communication (X). But how big the relationship is, it is not known yet. Therefore, to determine whether there is an influence or correlation between the dependent variable and the independent variable, further analysis is needed about the direction of the relationship of each of these variables.

### 3.2.2. Validity Test

Validity test is used to determine the validity or suitability of the questionnaire used by researchers to obtain data from respondents or research samples.

Table 5. Questioner Items

		Statement		
		1st – 5th Item	6th-10th Item	11th-15th item
Variable	Quality of Seafarer	(Y)	Use of Information Technology	Foreign Language Communication
			(X1)	(X2)

Comparing the results of the validity test in which the Pearson Correlaton item statement value more than 0.05 so it is declared valid.

### 3.2.3. Reliability Test

Reliability test can be carried out together on all statement items in the research questioner.

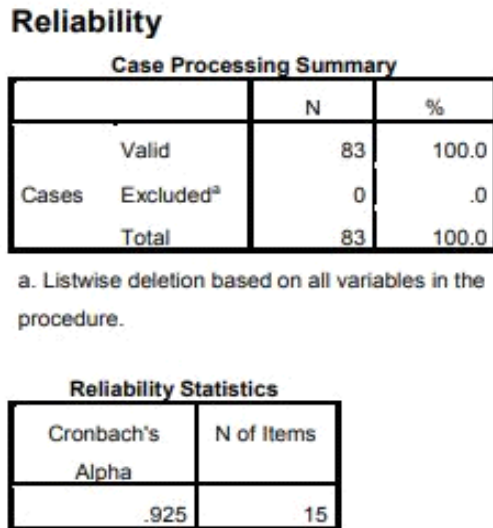


Figure 1. Reliability Test Results

The basis for making the reliability test decisions according to V. Wiratna Sujarweni (2014) is as follows:

- If Cronbach's Alpha value is  $> 0.60$ , then the questionnaire is declared reliable or consistent.
- Meanwhile, if the Cronbach's Alpha value is  $< 0.60$ , then the questionnaire is declared unreliable or inconsistent

Based on the results of the SPSS calculation above, of the total respondents, there were 83 cadets of STIP Jakarta, with 15 statements and a cronbach's alpha value of 0.925, means more than 0.60. it can be concluded that all questionnaire questions are declared reliable.

### 3.2.4. Correlation Test

Correlation test is used to test the presence / absence of a relationship and the direction of the relationship between two or more variables.

#### Correlations

		Kualitas Pelaut	Penggunaan IT	Komunikasi Bhs Inggris
Kualitas Pelaut	Pearson Correlation	1	.747**	.718**
	Sig. (2-tailed)		.000	.000
	N	83	83	83
Penggunaan IT	Pearson Correlation	.747**	1	.749**
	Sig. (2-tailed)	.000		.000
	N	83	83	83
Komunikasi Bhs Inggris	Pearson Correlation	.718**	.749**	1
	Sig. (2-tailed)	.000	.000	
	N	83	83	83

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Figure 2. Correlations Test

According to the correlation test results above which shown the coefficient is between -1 0 +1. Based on the output, there is a close and positive relationship between the use of IT on the quality of seafarers, as well as a close relationship between foreign language communication and the quality of seafarers.

It means that the more frequent use of IT, the better the quality of seafarers. Likewise, foreign language communication, which increasingly often affects the good quality of seafarers.

### 3.2.5. Regression Analysis

In this study using 2 (two) independent variables, therefore the regression analysis used is multiple linear regression which shows the effect of the independent variables on the dependent variable

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.791	2	7.396	63.974	.000 <sup>b</sup>
	Residual	9.248	80	.116		
	Total	24.040	82			

a. Dependent Variable: Kualitas Pelaut

b. Predictors: (Constant), Komunikasi Bhs Inggris, Penggunaan IT

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.708	.333		2.125	.037
	Penggunaan IT	.425	.093	.477	4.555	.000
	Komunikasi Bhs Inggris	.409	.118	.361	3.452	.001

a. Dependent Variable: Kualitas Pelaut

Figure 3. Regression Analysis



In the ANOVA table, the Sig. Obtained P value (P-value) = 0.000, thus the sig value <0.05 (significant level value), means that there is an effect between the use of information technology and English communication on the quality of Indonesian seafarers. Because the independent variable consists of 2 (two) variables, namely the Use of IT (X1) and English Communication (X2) Based on the table above, the regression model of this study is

$$Y = 0.784 + 0.425 X1 + 0.409 X2$$

The effect of IT use on the quality of seafarers shows a positive and significant relationship. This indicator can be seen from the t value of 4.555 and a low or sig measurement error. 0,000 (<0.05) or below 5% alpha. It means that the better the use of IT in teaching, the better the understanding or knowledge of seafaring cadets so that the quality of cadets will increase.

The results of statistical tests recorded that 47.7% of the quality of seafarers in this study was influenced by the teaching system using IT,

The effect of English communication on the quality of seafarers is quite positive and significant, this indicator can be seen from the value of t count > 3.452 and sig. 0.001 (<0.05), meaning that English communication in the classroom can raise or improve the quality of seafarers.

The results of statistical tests recorded that 36.1% of the quality of sailor cadets was influenced by the teaching system using English.

The combined effect of the use of IT and English communication on the quality of seafarers can be obtained from the R square number of 0.615 or 61.5% and the remaining 38.5% is influenced by other factors or other variables. The quality of seafarers which is influenced by 2 independent variables of IT use and English communication can also be seen from the sig. value indicator 0,000.

#### **4. Conclusion**

The influence of the use of IT and English communication has a positive and significant impact on the quality of seafarers.

The better the use of IT and English communication in teaching, the better the Seafarers' Quality.

The quality of Seafarers is influenced by 61.5% by the use of IT and English communication in classroom teaching, while 38.5% is influenced by other factors.

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