Distance Learning for Egyptian seafarers: a critique

Prof. Capt. Hesham M. Helal
Maritime Postgraduate Studies Institute, AASTMT
hhelal2000@aast.edu - Miami, P.O.Box 1029, Alexandria, EGYPT

Abstract: Maritime industry is one of the most important international industries as the majority of the global cargo is transferred onboard ships. It is organized through a group of international instruments such as; Conventions, Resolutions, Decrees, and Codes that give great cares for the three elements. Even though, the International Maritime Organization (IMO) prove statistically that more than 80% of the marine casualties occur because of human errors, which gives more emphasis to the importance of human element engaged on jobs either at ports or onboard ships [2].

This paper will focus on seafarers, the most important element of the maritime industry, from the education and training point of view. As, seafarers need to update their certificates (Mandatory Courses) every 5 years, in addition to the upgrading studies for the officers, and of course all of these courses should be done, otherwise the seafarer will not be able to renew their seaman book or Certificate of Competency (COC) to get a job onboard. Moreover, the fees for these courses are often slightly high, not only the course fees, but for seafarers who do not live in the same city they have to spend extra expenses to pay transportation and accommodation.

Thus, time and expenses represent tow major problems facing seafarers, as they should attend these courses in person at a maritime institute or Academy. Some countries like NORWAY considers the Computer Based Training (CBT) where seafarers can take the courses in their place without attending the courses physically in any institute, but this system is not applied in many countries like EGYPT. This might suggest a real need to solve this problem which may require using Distance Learning (DL) as a tool for all seafarers registered or graduated from EGYPT or from other ARAB States. Students may be asked then to attend the training sessions and exams to fulfill the administration requirements and also comply with all international regimes, saving most of the expenses for their transportation and accommodation.

Keywords: Maritime Industry - international instruments – Distance learning- Seafarers

1. Introduction:

In order to look for a job onboard, a seafarer should hold a valid Certificate of Competency (COC) in maritime field. Sometimes, the time for upgrading and getting mandatory courses required for a seafarer may conflict with his/her job schedule, leading in most cases to job loss. This represents one of the main problems in this regard. Moreover, relatively high course fees and the indirect expenses, such as transportation and accommodation, represent another major problem to seafarers.

To get around these difficulties, some countries provided Computer Based Training (CBT), where seafarers can take his courses at any location without attending physically in any institute. But this system is not commonly applied in many countries including EGYPT, which addresses the real need for other mechanisms to solve this problem [8]. Distance Learning (DL) represents one of these solutions.

In this case, applicants will take part of the course through DL, whereas the training sessions and examinations will be completed at the maritime institution, in compliance with the national administration requirements and international conventions, resolutions, decrees and codes. This particular alternative, that is DL, seems to be promising and will, therefore, be the main theme of the current endeavor.

Moreover, the international bodies encourage member states to use Distance Learning, as IMO in the last amendments to the Standard of Training, Certification, and Watch keeping (STCW 1978)
convention in its amendments in 2010 in Manila encourages member states to use modern training methodology including distance learning and web-based learning [3].

Also, the World Bank is now actively promoting the quality and relevance of tertiary education, while in the past the World Bank was emphasizing basic education and provided only ad-hoc support for tertiary educational development [11].

Furthermore, the opportunities offered by DL, facilitating both mandatory and upgrading maritime study, and reducing geographical constraints regarding travel and access. Thus, it could be the most efficient expansion route for tertiary education, as United Nations educational, Scientific, and Cultural Organization [9] clarified that one of the major benefit of DL lies in its potential for making knowledge and skills accessible to: Indigenous peoples and others located in remote, rural areas who do not have conventional access to higher education institutions and where there is often a shortage of well-prepared teachers and other educational professionals.

The purpose of this paper has two primary objectives. The first objective is to examine the relationships between on-campus studies in the maritime field including academic approach to deep learning to comply with the national and international requirements and to cope with the modern technology used recently at sea, and Distance Learning. Second is to explore the individual effects and benefits from the deep approaches to learning in distance education environments when delivering short courses (mandatory courses) and upgrading studies in the maritime field.

2. Seafarers' Problem:

Although many theorists develop theories about Distance Learning, but those theories are not suitable to be implemented as it is in the maritime field, which means they need some modifications to be capable to be used in this field. For example, Moore suggested that instructors must change their behaviors by changing their course structure and course dialogue, while in the maritime field the instructors disabled to change the course structure as they have to follow the course structure issued from the domestic administration and IMO [6].

Despite, the huge number of seafarers, they are suffering from lack of job opportunities, which has been reflected on their disability to pay for the courses needed to upgrade their certificates or to get the mandatory courses. In addition, they must comply with all conventions issued from the IMO and ILO and to be familiar with all required codes, resolutions and decrees as well, that means to get job opportunities they must be qualified and updated for these opportunities and able to compete with other nationalities. Usually, they attend these courses in maritime institutes but the majority of those seafarers are not living nearby those institutes or even out of the country, which cost them a lot of money not only for fees but also for transportation and accommodation.

Thus, they need an alternative method to fulfill these requirements rather than attending these courses in institutes which may be done through Distance Learning. Distance Learning up to now is not used in the maritime field in EGYPT and all studies depended on the traditional learning on-campus, but developed DL theory or new one may be a solution to overcome the seafarers’ problems of education.

3. Importance of DL for Seafarers:

The spread of technology, using of computer and computer-based communications are the major reasons nowadays for depending on distance learning as an alternative method of traditional teaching in classrooms [1]. Distance Learning gives opportunity to people who are disadvantaged from attending class while these courses are essential to seafarers. Several significant models were developed based on different theories that explain important aspect of DL. In explanation of the concept of DL, Wedemeyer clarified that DL is quite a different concept than traditional teaching in school as it's
physically separated from a teacher by means of communications through print, mechanical or electronic devices [10].

Thus, Wedemeyer put a concept or legislation for administrator, program planner, teacher and officials in governments and industry for a modern approach of education. Also, Moore (1990) built his theory (transactional theory) on Wedemeyer theory as he believes there is a distance in the relationship of learner and teacher in the educational enterprise, which is not geographic, but educational and psychological as well [10].

From the statement of Moore it is clear that his concept in education was based on a social consideration rather than physical consideration which fits with the nature and circumstances of seafarers’ life [5]. Thus, Moore’s theory contributes to DL by recognizing the industrialization of education, which depends on the number of the audience, so in the case of the maritime field especially in Arab Academy for Science, Technology and Maritime Transport (AASTMT) the mass of audience is expected to be suitable for establishing the use of DL programs for seafarers as most of them are not only located away from the campus in Alexandria, but also sometimes they are located overseas from Arab and/or African countries. Furthermore, Perraton defined distance education as;

“distance study is a rationalized method involving the division of labor of providing knowledge, which as a result of applying the principals of industrial organizations as well as extensive use of technology, therefore facilitating the reproduction of objective teaching activity in any numbers, allows large numbers of students to participate in university study simultaneously, regardless of their place and occupation”. [7]

Moreover, DL should be defined as a whole education, not only just a separation between teacher and student in space and time, which could be bridged by communications technology. The most common problem in teaching is the absence of the dialogue between the teacher and the students, which may occur even in the traditional teaching in the classroom, so the solution not in the face-to-face relationship but it is the way of creating a relationship between both of them, so DL may be considered as a product of postindustrial information culture. In other words, rather than traditional teaching for example in the maritime field tried to standardize marine sciences and instructions to make seafarers capable of performing routine job, DL role is to respond to individual differences and fulfill the national and international requirements as diversified as possible.

This brief review looks to the maritime field and the problem facing seafarers in Arab countries. Maritime institutions have thought of expanding the intake of new students despite the rising costs and quality of teaching. This needs from administrators and officials in government to find out alternatives in education methods, such as to consider the reliance on distance education to meet these challenges [6]. However, teachers and administrators are familiar and experts in on-campus maritime studies and are capable to deliver these courses (short courses & upgrading studies) and evaluate them, but there has been little research about the influence of distant learning and the institutions’ ability of providing quality learning experiences in the institutional environment.

4. Case study:

Two studies has been chosen, the first for the examining the effects of instructional format for both DL and traditional education, which this paper discuss. While the second has been chosen because of the society circumstances and the age range of the population of the study, which is similar to seafarers’ circumstances.

BUCCI, conducted a study to examine the individual and interaction effects of instructional format (distance education and on-campus environments) and academic disciplinary affiliations on deep learning [1]. Data has been utilized from the Faculty Survey of Student Engagement (FSSE) Indiana University. The FSSE has collected data from 630 institutions and 160,000 faculties since its first offering in 2003 and provides valuable information about faculty behaviors, perceptions, and expectations, particularly regarding their influence on student engagement. The sample for this study consisted of 6,396 faculty students in four-year institutions across the United States. This population
included all faculty teaching distance education and a 20% random selection of one-fifth of faculty teaching in the classroom instructional format who responded to the 2010 and 2011 course-based FSSE. In all, the sample population included 2,125 faculties who instructed in distance education (33.2%). Although a wide range of faculty disciplinary representations were included in this survey, including 85 unique disciplines and represented by each of the six Holland disciplinary environments and one “other” category, the largest number of respondents were from the Social disciplinary environment.

The results indicate that faculty reported a moderate to high emphasis on deep approaches to learning in both distance education and classroom environments. However, the results also indicate that instructional format, and distance education in particular, have a significant predictive relationship on the extent to which the faculty emphasizes deep approaches to learning. Likewise, the results suggest that faculty disciplinary environments also have a statistically significant relationship with the extent to which faculty are likely to emphasize deep approaches to learning in distance education. With the increasing growth of distance education offerings across higher education and increased concerns about quality in the learning environment by government agents and institutional administrators, an emphasis on recruiting tenured faculty to instruct in alternative instructional formats would serve as an important contribution to educational quality.

Only 449 of the 6,396, or about 14% FSSE participants in distance education were tenured or tenure-track faculty. Although many institutions have increased their reliance on distance education over the previous 20 years, the descriptive results from the surveyed faculty indicate that faculty instructed in almost two-thirds fewer distance education offerings than in on-campus courses. In other words, on-campus courses represented the dominant instructional format in the surveyed institutions in this sample, and within the surveyed population, tenured and tenure-track faculty represent a small proportion of faculty who instruct in distance education.

Overall, this study shows that faculty is more likely to emphasize deep approaches to learning in distance education environments than in on-campus environments, that disciplinary environments are likely to influence faculty emphasis on deep approaches to learning in distance education, and that both instructional format and discipline are likely to impact faculty emphasis on deep approaches to learning.

KEMP examined the relationship between determination in distance education and resilience, life events, and external commitments [4]. His study showed that there were approximately 10,000 registrations signed up for an undergraduate distance course at Athabasca University in January 2000. Students were considered to be first-time distance students if they met the following conditions: (a) they were registered in one undergraduate distance course as of April 1, 2000; and (b) this was the first undergraduate distance course in which they had been registered at Athabasca University. Students who were between the ages of 30 to 45 only were included in that study to control for the essential variable of age. After the approval by the Ethics Review Sub-Committee, a random sample of 460 undergraduate students, who were between the ages of 30 to 45 and registered in their first undergraduate course was attained from Athabasca University student records, a procedure following the approval by the Human Subjects Sub-Committee. Students who participated were asked to complete the Resiliency Attitudes Scale, the Life Events Inventory, and a questionnaire all included in a questionnaire package.

A student at Athabasca University has six months to complete a three- or four-credit course, and 12 months to complete a six-credit course. Students can work at their own pace and complete courses as quickly as they like. The questionnaire packets were mailed on April 25, 2000 to students who had registered in their first undergraduate course as of April 1, 2000.

Data were gathered from student records on February 5, 2001, to check if the students enrolled did in fact complete the course. Of the 460 students, 124 completed and returned the questionnaire package, other packages were discarded due to being spoiled or incomplete. The resulting 121 completed packets generated a response rate of 26.9%. This response rate is considered adequate for mailed surveys, consequently there was no follow-up notification through postcard.

All respondents were registered in a 3- or 4-credit course, with the exception of four students who were registered in a six-credit course. As of February 2, 2001, 57 students (47%) had successfully completed the Athabasca University course in which they were enrolled, and 64 students had not. Of this second group of non-completers,
(a) 38 did not begin work on their course,
(b) 19 withdrew from their course, and
(c) 7 received an academic failing grade.

Figure 1 Sample population distribution

- None of the students registered in a six-credit course completed their course; three did not initiate work on their course and one withdrew from the course. More than half of the students in the non-completer group (53%) had previously taken a distance course. For the most part, external commitments—in the form of personal, family, home, financial, and community commitments—were not found to be significant interpreters of persistence (or lack of persistence) in distance education.

- In other words, students with high levels of commitments in these areas were no more or less likely to complete their Athabasca University course successfully, in comparison to students with lower levels of commitments in these areas.

- This study contributes to the field of inquiry relating to persistence in adult distance learning by providing insight into the resilience skills employed by adult students who successfully completed their first course at Athabasca University. The field is widened to include better predictors of adult student persistence. Additionally, this study adds to the understanding of the application and limitations that prominent theories of persistence have in relationship to distant learner populations. Finally, the results provide practical efficacy by offering an evaluation guide for distance education institutions to respond more effectively to the needs of adults. The study may help adult students, faculty, and administrators better understand persistence and dropout in undergraduate distance education.
5. Conclusion:

This paper illustrates seafarers’ problem regarding certificate renewal and upgrading necessary for their career development. This requires them to attend courses on-campus, resulting in loss of time and expenses for course fees, transportation and accommodation for those who leave away from the campus, which is sometimes in a different city or even country. Thus, the suggested solution to this problem lies in DL, since the other solution of CBT is impossible, as it is not recognized by the authority. DL can be used, as it is also recommended by the IMO.

To make sure of the results of using DL as a solution for seafarers in Egypt two case studies have been discussed and results of both are recognized, which proves that using DL in both cases was a better solution. However, a limitation of the present research is that it does not include a case study for seafarers, as no relevant studies were found in the maritime field. Similarly, it does not include statistics in Egypt or in the maritime field, which will be undertaken by the researcher in future studies.

References:


