CADETS VIEWS ON UNDERGOING MARITIME EDUCATION AND TRAINING IN ENGLISH

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Abstract

Several studies clearly indicate that most accidents at sea are related to human errors many of which are due to communication difficulties and are most frequently based on lack of appropriate knowledge of the English language. This language barrier is most common amongst multinational crews and port authorities, particularly in restricted waters. The correct use of English in the global maritime profession is considered crucial to avoid incidents at sea and to facilitate a more effective means of communication between ships and ship and port as well as to harmonise management and operations onboard vessels with multi-national crew. The number of ships with multi-national crew is rapidly increasing and this trend is expected to amplify in the future.

Turkey has a considerable maritime history and a large and well-educated population of young people who would be willing to serve at sea. These factors make Turkey, in particular, a valuable potential source of large numbers of seagoing personnel of different types and levels of seniority, which would considerably enhance manning on a worldwide scale. However, Turkey has no great history of adherence to English as anything other than a minor school subject: this means that few young Turkish people currently recognise that good English language skills can create employment opportunities world-wide in a wide range of sectors, particularly as seafarers in the maritime industry.

In 2003, the Turkish Maritime Education Foundation (TUDEV) initiated a programme to conduct maritime education and training (MET) in English alone. To achieve this required coordination and cooperation with many other maritime education establishments as well as awarding and accreditation authorities abroad. This resulted in TUDEV becoming heavily involved in several EU-funded projects based on the development of maritime English language training (SOS and MarTEL) and other related topics such as maritime safety (TRAIN 4Cs I and II, MAIDER and EGMDSS) and automation and risk assessment/management (SURPASS).

This paper reports on an evaluation of TUDEV's new programme by its own cadets who have undergone their MET programme in English. Their views on a wide range of aspects of the MET were collected. The results were analysed which has helped TUDEV to refine its teaching and learning model. It is anticipated that MET institutions who wish to deliver their programme in English could benefit from TUDEV's findings.

Keywords: Maritime Education and Training, Maritime Safety, Maritime English

1. Introduction

The English language requirement for an Unlimited Officer of the Watch is defined as 'Adequate knowledge of the English language to enable the officer to use charts and other nautical publications, to understand meteorological information and messages concerning ship safety and operation, to communicate with other ships and coast stations and to perform the officer's duties also with a multilingual crew, including the ability to use and understand the Standard Marine Navigational Vocabulary as replaced by IMO Standard Marine Communication Phrases' in STCW 78 (95). It is evident that an unlimited Officer of Watch should have a good command of the English language to meet the above mentioned requirement.

It is also evident that most accidents at sea are related to human errors, mainly because of communication difficulties (UK P&I Report 2007, Ziarati, 2006). This problem most frequently is the result of a lack of knowledge in the proper use of the English language and maritime terminologies. There is a language barrier between multinational crew aboard different flag ships and the ports they frequent in their normal trade while sharing amongst them the same restricted waters. The use of the English language in the global maritime profession has and is crucial in avoiding accidents/incidents at sea, as well as in harmonising management and operations of ships sailing with multi-lingual crew (Loginovsky, 2002).

To overcome the seafaring officers language problem, two decades ago Turkey established a one-year English language preparatory programme, similar to many other non-native English speaking countries, considering the importance of teaching English in the context of Maritime English (Loginovsky, 2002) by delivering the seafaring officer's education and training in English itself. Unfortunately, due to a shortage of qualified maritime lecturers who are able to teach the MET main units in English, the programme did not succeed as planned at the time. Learning from this experience led TUDEV through international collaborations and with support from the EU TUDEV reconsidered the delivering of its programmes for deck officers and marine engineering officers in English.

In 2003, after extensive studies, the Management Board of TUDEV decided to re-initiate the earlier plan and introduce a one-year English programme and review it's MET for deck and marine engineering officers and deliver them in English. All students through careful planning were also introduced to Maritime Turkish and some of the safety elements were also delivered in Turkish. Students who were deemed to have not reached the required level of competency in English after the one-year English preparation programme or did not wish to study their programme in English were grouped into Turkish cohorts where most of the main units were delivered in Turkish with exposure to English maritime terminologies.

2. The Maritime Education and Training in English Alone

BTEC (Business and Technology Education Council) HND (Higher National Diploma) programmes which are run in many countries worldwide were selected to be applied in TUDEV Institute of Maritime Studies. To ensure the quality of the system, an agreement has been established with EDEXCEL and SQA (Scottish Qualification Authority) concerning the delivery of both the academic programmes (HNDs) and vocational qualifications (NVQ and SVQ through partner colleges in the UK). TUDEV has also established cooperation with some well-known universities and colleges in the United Kingdom, Norway, Finland, Poland, Holland and several others.

In October 2003, the new system was launched for a core group of 22 deck students. In 2004, a second group started in the same programme as well as the HND and NVQ for Marine Engineering cadets. In 2005, the MET system offered by the Institute has been modified to include a full-range of English HND programmes and an agreement with Plymouth University offering an opportunity for TUDEV graduates to enrol on the final year of the Plymouth University's BSC (Hons) in Nautical Science (Commercial Shipping) Programme.

The main problem encountered was finding qualified lecturers to teach the main underpinning knowledge units (HND Units) in English and applying the sea training vocational units by expecting the cadets with support from their placement vessels to implement these units in English language. In order to overcome the problem of a shortage of maritime lecturers with good English language skills, several former navy officers with remarkable sea experience and good teaching skills in the English language who previously taught in Naval Schools were recruited. Additionally, some lecturers from UK and Canada MET Institutions were invited to join the teaching and research teams to support the programmes. This provided a good blend of different cultures which is the natural environment of the maritime world.

In parallel a study was initiated to improve the repository of books and equipment and was duly completed albeit at a considerable cost. Furthermore, ARPA Radar, Bridge and GMDSS simulators were upgraded; and, a brand new Bridge and later an integrated Engine simulator were added to the physical resources.

In 2005, TUDEV initiated SOS (Safety on Sea), a European Union Leonardo Project concerning improvements in MET and development of several new laboratories as well as a re-vamp of the workshop and the maintenance workshop to ensure that they are in line and of the same standards as those in leading MET institutions in Europe. This project was supported by a 'mobility project (TRAIN 4Cs)' to prepare TUDEV's graduates for UK MCA examinations for a second certificate of competency. Consequently, TUDEV has become increasingly involved in several EU funded Projects that include: development of Maritime English Language (MarTEL), Maritime Safety (M'AIDER) and Risk Assessment/Management (SURPASS). TUDEV has also been invited to the join the European Boat Design Innovation Group (EBDIG).

The English language preparation programme is a key requirement but it is not sufficient to follow the vocational programmes' requirements for which, additional language training measures have been instituted comprising higher learning skills - reading, writing, listening and speaking skills.

In 2007, an EU project called Maritime English Language (MarTEL) Training programme commenced at TUDEV. The purpose of this project was to define the contents of the Maritime English language courses and structure them to measure/assess the Maritime English language competency of seafarers at different levels. The results, of which could be used worldwide to evaluate Maritime English skills of seafarers in light of the STCW requirements, were found quite satisfactory.

At TUDEV there was some resistance from some of the students who demonstrated weakness in learning the English language to the level required for the main programmes. They complained that they were unable to follow the main courses delivered by foreign visiting lecturers because of the subjects being taught fully in English. To solve this problem, some

Turkish lecturers were assigned to support the vocational units in need of being taught and/or explained as the need arose in the Turkish language. In this regard, a proposal to transfer a group of students, who demonstrated a weakness in the English language into the Turkish programmes received strong objection and were to some degree refused in order to protect the strength and integrity of the system, since the English language is the recognised and accepted language of seafarers world-wide. Grouping the cadets into different cohorts and adding additional support to explain the core units also in Turkish solved most of the problems encountered.

However, to improve and remedy the foregoing situation more effectively, additional course hours were added in teaching some of the main units in the Turkish language to students who earlier demonstrated weakness in understanding the subjects in the English language.

Another problem was the accreditation of the HND and NVQ (and SVQs) programmes, due to differences between BTEC and Turkish assessment procedures. The latter uses a 'percentage' system of marking, which is based on a candidate's overall knowledge of a subject and, the former is a criterion referencing system based on the fulfilment of each outcome of the unit and a set of assessment criteria which are all expected to be satisfied if a Pass Grade is to be awarded. In this regard, the adaptation of the new requirements in grading the examination papers by our lecturers was understandably difficult.

Despite the foregoing set-backs, TUDEV has witnessed good success in the delivery of its overall MET programmes. The success was confirmed by evaluating the results of our graduates who took the Seafarers Examination. The reports in the Sea Training portfolios documented 'customer satisfaction' has been substantially increasing, which was apparent by the number of requests from shipping companies for our students for employment as well as for sea training aboard their ships. The percentage of scholarships provided by companies has also increased significantly compared to previous years.

3. Student survey

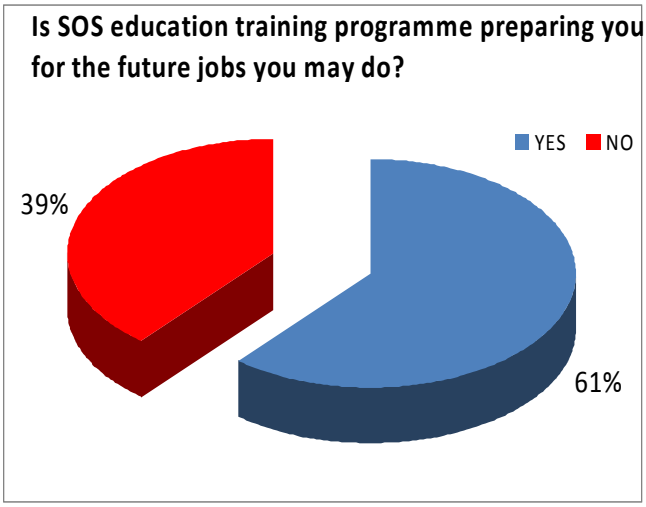
3.1. Nomenclature:

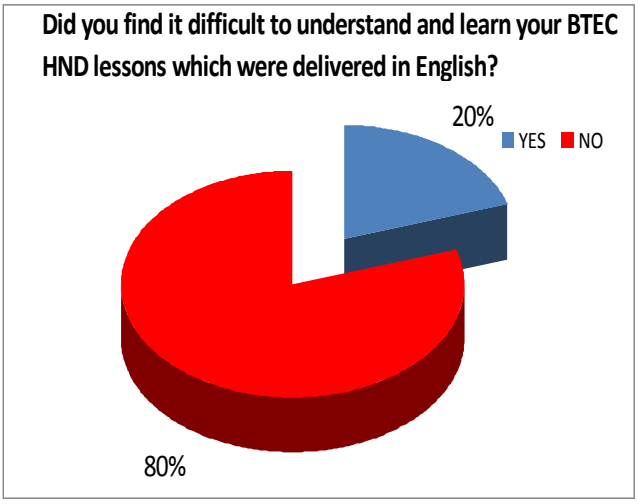
BTEC– Business and Technology Education Council
HND – Higher National Diploma
NVQ – National Vocational Qualification
SVQ – Scottish Vocational Qualification
BTM – Bridge Team Management
SH – Ship Handling
EDH – Efficient Deckhand
SOS – EU funded 'Safety On Sea' project which combined BTEC HND, NVQ/SVQ, BTM, SH and EDH together with IMO safety courses such as Fire Fighting and so forth. SOS MET Programme developments were led by TUDEV with support from several partners in Europe. For more information about the partnership please see www.maredu.co.uk or www.c4ff.co.uk.

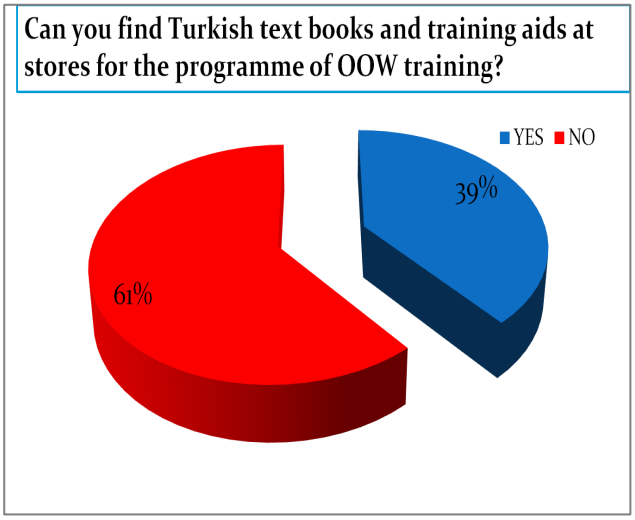
A survey was conducted to verify the advantages and disadvantages of the effects of TUDEV's SOS project particularly one of its main component BTEC HND system on the cadets.

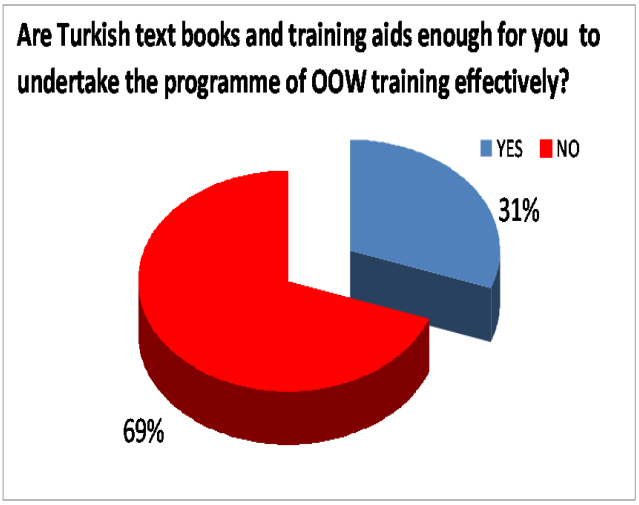
Total 30 questions were presented to the final year cadets who had both negative and positive implications. The results have also been analytically evaluated by using SPSS 17.0 programme and all of the results were found in acceptable criteria.

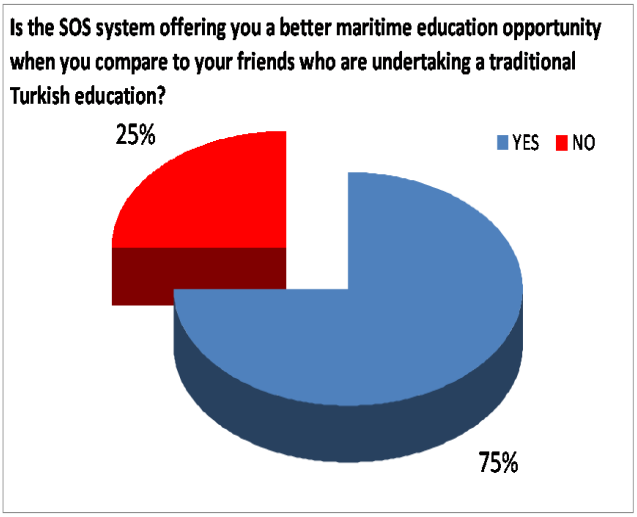
3.2. The questions and responses are as follows:

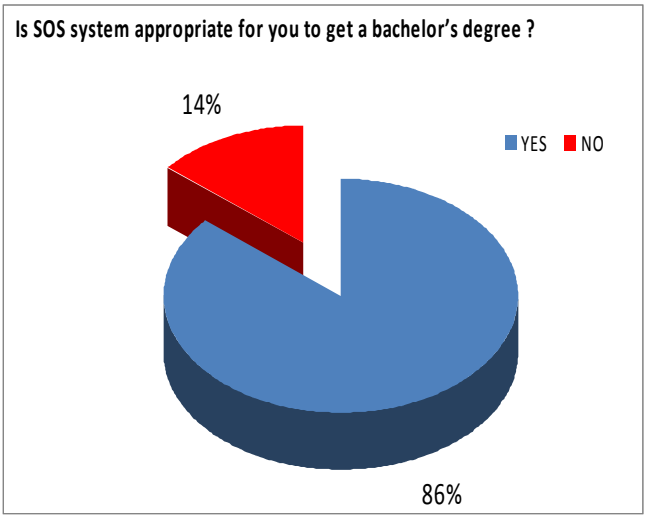




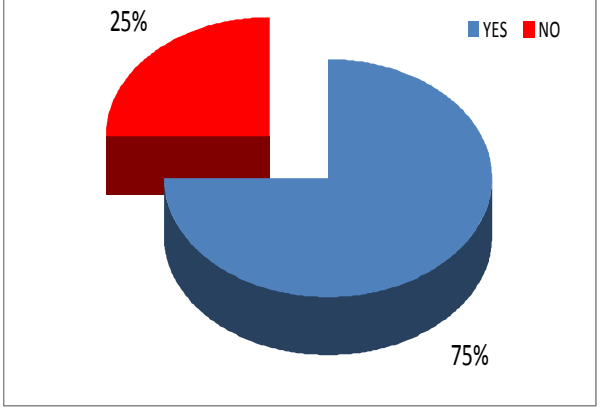




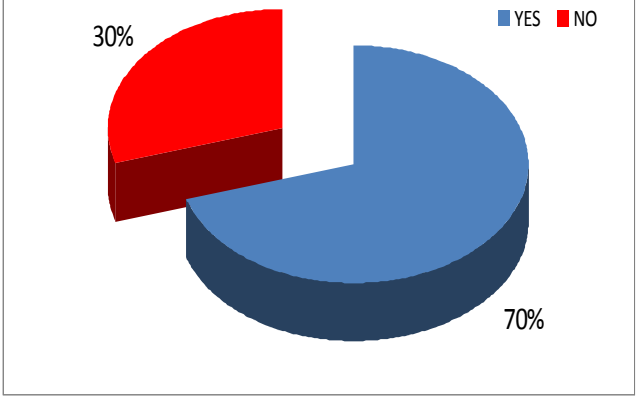




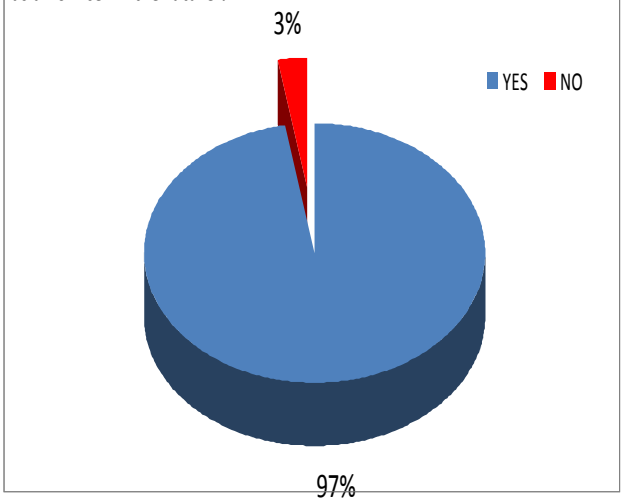
If you desire to continue and study at a university or other higher education institutions to improve yourself, do you consider that BTEC programme is an advantage for you?



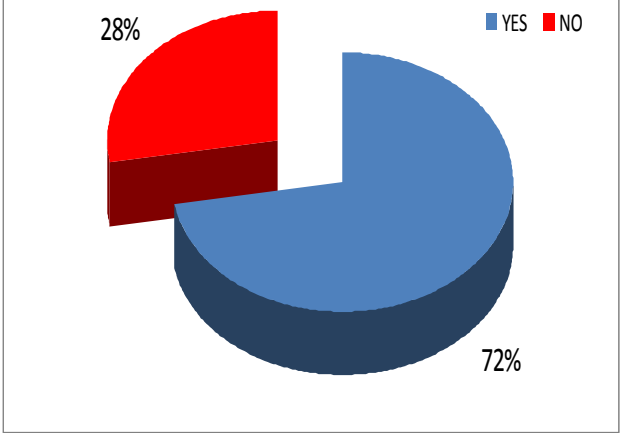
If you compare SOS sea training portfolio with the one used before, do you consider the SOS sea training portfolio to be more suitable and effective for your training?



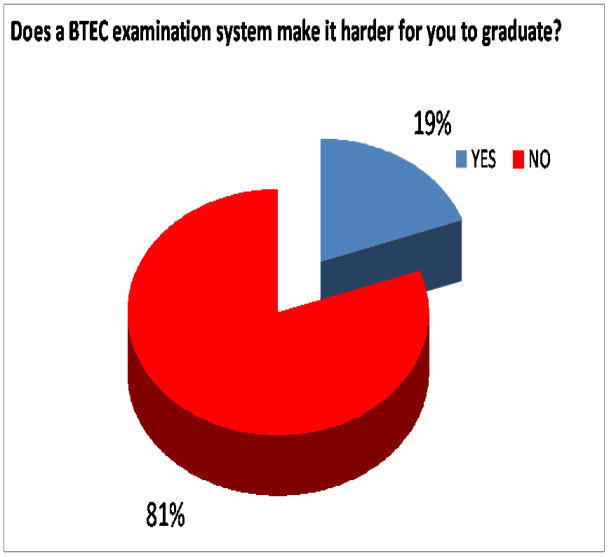
Do you think a higher level of English knowledge is essential for the success as an officer in the future ?



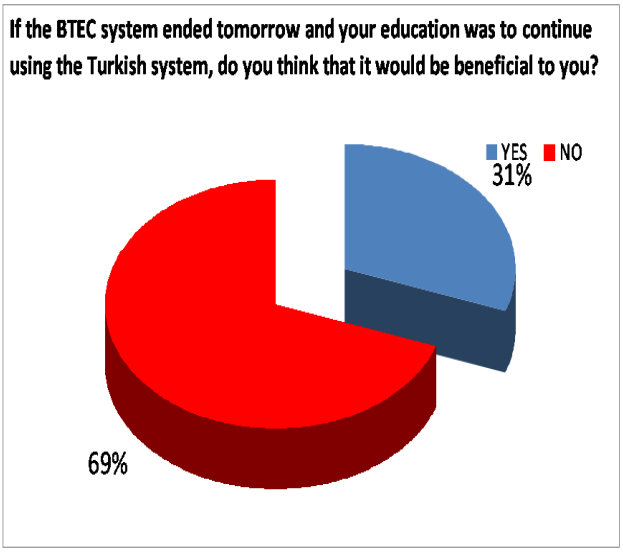
If you are a ship owner, do you prefer a SOS graduated officer or not?

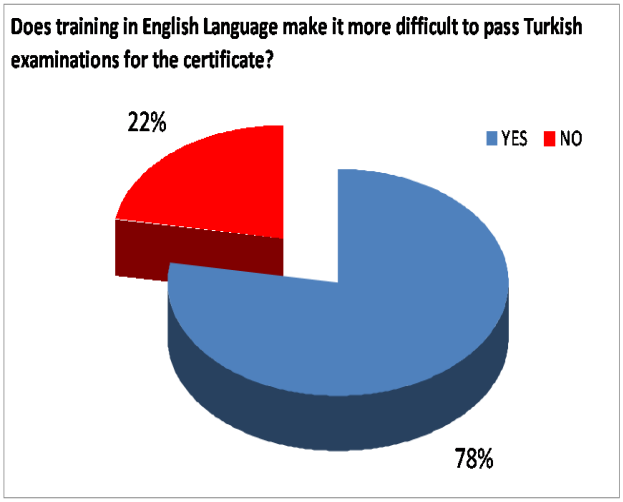


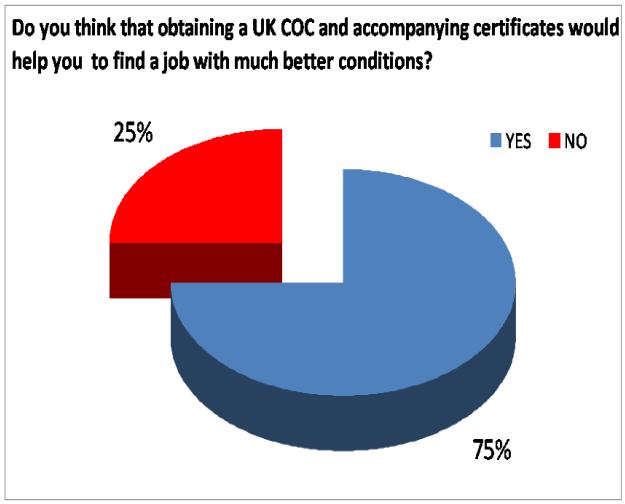
Does a BTEC examination system make it harder for you to graduate?

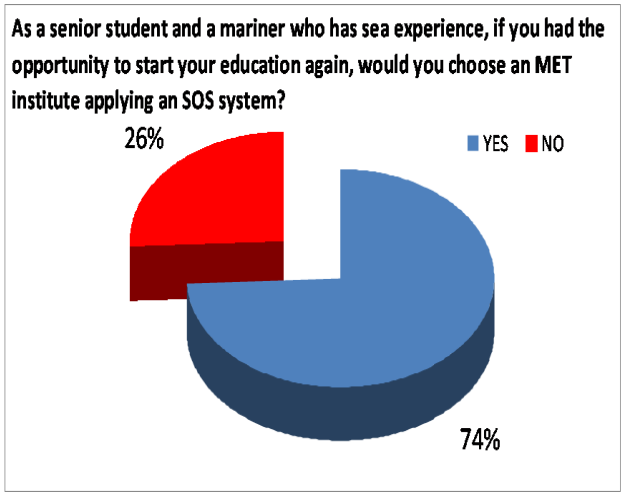


If the BTEC system ended tomorrow and your education was to continue using the Turkish system, do you think that it would be beneficial to you?









3.3. The results of the survey;

- At this stage, 70% of cadets are in favour of the programme. They are fully aware of the importance of improved English language skills and recognise that this will help them in the future as an officer. They consider having a BTEC diploma as a privilege.
- Surprisingly, using English language in lessons and examinations seems not to have a negative impact on students' learning experience as was expected.
- As an observation, they consider the BTEC system to have a higher pay-off in the future to them than the higher fees they pay for their BTEC education. We believe this is the main reason why they have chosen TUDEV.
- The only resistance surfaced at the question **"Does training in the English language make it difficult to pass Turkish examinations for the certificate?"**
- We share this view but have also taken necessary precautions. For every subject, comprehensive Turkish learning material has been prepared by the lecturers. Also special courses were planned.

3.4. The negative factors affecting the system

To identify the negative factors affecting the system at present in TUDEV and to amplify the marginal negative responses at the survey, a set of questions were asked to the cadets. The answers have 5 effecting levels. From one point (is not effecting) to five points (effecting too much).

FACTOR	EFFECTING LEVEL
Low quality entry into the programme	3.8
Insufficient basic English language training	3.7
Difficulties to understand the foreign lecturers	3.7

FACTOR	EFFECTING LEVEL
Deficient library	3.5
Lack of text books	3.5
Poor attendance by students to lessons	3.5

FACTOR	EFFECTING LEVEL
Deficiency of lecturers with good English language skills	3.4
Assessment in English	2.9
Having additional units including local requirements	2.9

4. Conclusion

As a result of this study the advantages and disadvantages of BTEC and training using theEnglish system has been evaluated. This evaluation will be used as a guidance to overcome the difficulties and improve the system**.**

Advantages of BTEC and training in English:

- Opening new horizons to cadets, they may find jobs under every flag
- An excellent English learning opportunity, which they will use also in the Turkish flag
- Up-graded effectiveness to work with multinational crew
- Much more detailed training programmes
- Comprehensive and more up-to-date education and training resources
- Chance to convey huge experience of a country which has a long maritime tradition
- A good promotion of TUDEV and aid to recruit new students
- Opportunity for developing funded European and international projects in support of the BTEC system
- Opportunity to receive accreditation from international professional bodies
- A true criterion referencing assessment system - zero defect

Disadvantages of BTEC and training in English:

- Initial problems of understanding due to language difficulties
- Hard to find experienced Turkish lecturers
- More education time because of additional requirements
- Harder to achieve Turkish certificate examinations as well as the BTEC qualifications
- A more expensive system of training

In the light of overall assessment the following items are considered to be carefully investigated to improve the MET education and training in English. These issues can be used and considered by the other countries who intend to deliver their MET programmes in English.

- Advantages of the BTEC system outweigh the disadvantages. The remedies to eradicate the disadvantages should be carefully considered.
- Students are in favour of the BTEC training programmes. The resistance at the beginning can be removed by explaining the advantages of the system to the students.
- Moreover, the students are able to understand that MET in English is beneficial for their future career improvement.
- A detailed study is required to eliminate the negative impacts of some of the factors in the overall system.
- According to the outcome of the survey the main problems are not because of the new system but because of the shortcomings to support the system.
- Simulator training requires additional resources and a serious programme of staff development for effective use of simulators as a teaching and learning tool. An intensive project should be carried out regarding the recruitment of foreign lecturers who are essential to support the system in particular at the commencement of the system.
- Precautions should be taken to improve Basic English language training before starting the main programme.
- It is highly recommended to continue delivering MET in English programmes in line with the BTEC system.
- To improve general maritime knowledge, morale and social life of cadets the following additional issues are proposed;

    - Visiting maritime museums, VTS (Vessel Traffic Services) Stations, ports and taking briefings,
    - Having conferences on maritime related subjects,
    - Encouraging visits to art museums, theatres, sports events,
    - Participating in national and international projects,
    - Improving social, artistic and fitness facilities in MET institutions.

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