

Leader of Character Framework for Bachelor Degree in Maritime Technology Graduates

Zulkifly M.R. *, Tang J.W., Sarah I., Ainul A.R., Afiqah R., Mohd Afizi M.S.

Faculty of Science and Defence Technology, Universiti Pertahanan Nasional MALAYSIA

*Corresponding author E-mail: zulkifly@upnm.edu.my

Abstract

The current employability of Bachelor Degree in Maritime Technology graduates needs to be improved to meet the requirements of stakeholders such as Royal Malaysian Navy, maritime agencies and industries. Hence, the curriculum of this degree needs to be reviewed to produce the right graduate to serve the maritime agencies and industries. The research was done through brainstorming, discussion, meeting and decision by a Committee Member established by the faculty. The finding of the committee concluded that all UPNM students will be assessed on six attributes as Leaders of Character which include: a graduate officer, commissioned officer, sports person, *imam*, master in self-defence, and lastly an officer and a gentleman or lady. The graduate officer assessment is based on academic performance reflected in his/her CGPA to be above 2.7. The naval cadet officer assessment is based on the successful completion of training to be commissioned into Royal Malaysian Navy. To be a sports person, a student must register in at least one sport in the co-curriculum courses. The spiritual leader assessment for a Muslim to an imam and to read sermon during Friday prayers whereas a Non-Muslim will learn to pray and worship in his/her religion. Self-defence will be assessed through self-defence courses such as taekwondo or other parts of self-defence. An officer and a gentleman or lady is assessed by observing on the attitudes, ethics, morals, courtesy, positive values, determination, behaviour and lastly discipline. The assessments are reported through radar plots, which include six attributes in the LoC. The Bachelor Degree in Maritime Technology graduate who acquires all the six attributes will be awarded with a Diploma in LoC as an added value in their degree for their future employment.

Keywords: *Leader of Character, Graduate Officer, Commissioning Officer, Sport Person, Spiritual Leader, Self-Defence, Officer and Gentleman*

1. Introduction

The Honorable Prime Minister of Malaysia has launched the Malaysia Education Development Plan (MEDP) 2015-2025 that outlined steps to achieve excellence in the education system among institutions of higher learning. This plan provides directions towards the development of humanity among graduates at higher institutions of learning in line with the nation's philosophy of education. Having knowledge in relevant disciplines, strong morals, sound mindsets and good behaviours among graduates will contribute towards the well-being of families, society, nation and global community. The first thrust in the MEDP is to produce graduates who are holistic, balanced and having traits of entrepreneurship. The holistic development of a person entails six attributes and have to be carried out in accordance with the educational objectives of an institution of higher learning (IHL). The application of the six main attributes as advocated by Ministry of Higher Education (MoHE) is a continuation of education process which started at the school level. The objective of the paper is to implement the concept of Leader of Character (LoC) consisting of six attributes which entail a graduate, commissioned officer, sports person, spiritual leader, master in self-defence, and lastly an officer and a gentleman or lady.

2. Graduate Officer

Universiti Pertahanan Nasional Malaysia (UPNM) was established on 10 November 2006 for the core areas of study in defence and security. The undergraduate students at UPNM belong to three categories. The first category is officer cadets who are selected by the Malaysian Armed Forces (MAF) according to Section 198, Armed Forces Act 1972. Officer cadets are potential to be commissioned as MAF officers with the rank Sub Lieutenant or equivalent by His Royal Highness the King to serve in the Malaysian Army, Navy or Air Force. The second category is Reserve Officers appointed by the MAF according to Section 198, Armed Forces Act 1972 to serve in the Army. The third category are civilians students who are not subject to the Armed Forces Act 1972 and have to enrol for co-curriculum courses in place of military training or reservist training. A Graduate Officer refers to Cadets Officers, Reservist Officers and civilian students who passed the academic undergraduate Bachelor programme at UPNM with a Cumulative Grade Point Average (CGPA) of 2.0 and above. The high achieves graduate is the first attribute to be developed in the framework of LoC for all UPNM students which include the Bachelor Degree in Maritime Technology graduates.

3. Commissioned Officer

The second attribute of LoC is for Cadet Officers to be commissioned into the MAF services by His Royal Highness the King. After undergone a year military training at the Defence Foundation Programme, a potential cadet officer is assessed on academic results, physical and mental fitness, discipline, leadership and military skills. A potential commissioned officer must pass an overall medical examination at Armed Forces Medical Centre which examines the physical and mental health of candidates. Students are required to pass the 2.4 km run, sit-ups and hand pumping. The students' Body Mass Index (BMI) must not be more than 23.0 and they must also possess the traits of a leader as a young MAF officer. A Cadet Officer must obtain a minimum CGPA of 2.70 as stated in the agreement to undergo study and training at UPNM stipulated in Armed Forces Council Instruction Serial Year 2009 (A). Cadet Officers are also required to undergo general military training at every semester of study carried out at the Military Training Academy.

4. Master in Self-Defence

The third attribute of LoC is to master in one of the art in self-defence or unarmed combat. Originally, this art of self-defence was used to fight the enemy in the battlefield. However, the art of self-defence has now spread to institutions of higher learning as a sport activity and the formation of self-defence club. This activity heightens interest among students when it becomes a recognised co-curriculum in the academic programme. Even though the art of self-defence has become a sport, this activity is focused more to promote physical fitness and the ability to defend oneself. The art of self-defence builds personal character, promotes the traditional spirit of a warrior, trains the techniques in fighting, improves the attitudes and spiritual development. The Taekwondo course is a compulsory co-curriculum for Cadet Officers and Reservist Cadet Officers to qualify them as LoC. This module involves kicking movements, punching and attack and unarmed combat until the trainees obtain a black belt [1]. Besides that, the art of Silat is also offered as a credit co-curriculum like Taekwondo and Karate. The course in Silat, Taekwondo and Karate require students to master basic skills in the sport and apply them to defend themselves or in competitions. In order to produce LoC, it is important for UPNM students to obtain a black belt in *Silat* or Taekwondo. Through intensive training in *Silat* or Taekwondo, the spirit of self-confidence is manifested among UPNM students. This course helps to augment the leadership attribute among students to become LoC after graduation [1]. The art of self-defence course is aimed to produce LoC possessing physical endurance and mental strength. This character is built by practising the efficient and agile movements of self-defence. The physical endurance of students is shaped through the art of self-defence in the manner focusing an opponent at a competition. The art of self-defence is able to produce self-confidence among graduates to defend the security and sovereignty of the nation. A LoC is able to lead a person to fight until the end to achieve success. Self-discipline is an important trait for a leader to carry out the responsibilities as a head of an organisation especially in the MAF.

5. Sports Person

The fourth attribute for a LoC is to be able to build a strong body and healthy mind besides building up unity among a multi-racial community through sports. Sports activity at IHL is able to project the image of a university at the national and international level.

Young sports personalities can be leaders as the philosophy of sports will help them to manage time between learning and participating sports. Sports builds healthy minds, self-confidence and a never give up spirit to achieve success. Knowledge in sports science and sports technology can bring about transformation to produce a sport-person at the international level. Students who are involved actively in sports will help to reduce health problems and unproductive activities at IHL.

The education philosophy at UPNM places sports as an important subject to produce a LoC to preserve the security and sovereignty of the nation [2]. The effort is to produce graduates who are knowledgeable, resourceful, good behaviour, responsible and capable to achieve personal well-being, contribute toward harmony and prosperity to families, communities and nation [3]. The concept of 1 student 1 sport is the approach to realise the sports philosophy at UPNM. This requires every student to participate at least a sport in the university. This concept supports the model LoC to produce well-balanced and holistic graduates. Students are able to enroll for courses in sports offered at the Bachelor Degree level. The involvement of sports in UPNM has become a criteria for student to be awarded a LoC. With this award, it is believed that the stakeholders will have more confidence in the graduates produced by UPNM.

6. Spiritual Leader

The fifth attribute of LoC is to be a spiritual leader who plays an important role in a community as he is looked upon as a role model. The righteous and honourable personalities of a spiritual leader such as *imam* for a Muslim leader is highly esteemed by his followers. The holy appearance of a spiritual and religious leader draws respect from his subordinates. In this way, students displaying the attributes of spiritual and religious leaders will also draw respect from other students. Religious education in the form of theory and practical according to the Al-Quran and Hadith will build good character contributing toward moulding LoC. Developing imams and religious leaders through courses at UPNM are tangible ways to build LoC. Religious education helps to shape student behaviours, leadership and good manners outlined in the National Education Philosophy. Courses that are carried out include *Fardhu Ain* and *Fardhu Kifayah* knowledge in the study of the *Al-Quran* and *Fiqh*. The Islamic way of life concept is adopted to guide students by the Islamic Centre of UPNM.

7. An Officer and a Gentleman or Lady

The last attribute of LoC focuses on the concept of developing an officer and a gentleman or lady with courtesy and politeness aligned to the National Education Philosophy. The concept of courtesy exercised at UPNM will produce LoC who are outstanding and committed to serve the nation and meet the strategic goals at the nation [3]. The development of an officer and a gentleman or lady needs to be emphasized at the early stage of students' life. The academic domain alone is not sufficient to produce an officer and a gentleman or lady because the building up personality and good behaviour are necessary components to prepare students for their future. Therefore, the performance of students cannot be solely based on academic achievements alone. Embracing the concept of an officer and a gentleman or lady is part of the attributes of a LoC which needs to be assessed before students graduate. Among the values need to be embraced are positive attitude, ethics, morals, good virtues, tenacity, good manners and discipline. Thus, UPNM has an important role to build courtesy and other good behaviour to

mould students into an officer and a gentleman or lady. An officer and a gentleman or lady model to be embraced by UPNM students is based on eight elements that form a Malay word "SEMANGAT" is shown in the Figure 1.



Fig.1: An Officer and Gentleman or Lady Model Based on 8 Elements

7.1 Attitude

Having the right attitude is the most important element in moulding an officer and a gentleman or lady. Having the attitude of putting others interest before self and putting duties and responsibilities first are positive attributes which have to be embraced by the students. Negative attitudes such as arrogance, disrespectful and concern for self-interest need to be discarded. Every behavior displayed must be directed at the interest of others. Courage is a positive attitude to be assimilated. Courage can be strengthened through mental and military training. The attitude of a student affects his emotional health and his patience and sense of loyalty when undergoing training at UPNM.

7.2 Ethics

Ethics refers to the way of a student interacts among themselves and with outsiders. Ethics through conversation brings about positive social impacts to mould an officer and a gentleman. Ethics strengthens the feeling of oneself, team spirit and promotes the image of UPNM. Embracing good ethics among UPNM students will lead to moulding an officer and a gentleman to face future challenges. Ethics can be displayed via the attire when attending lectures, official functions, prayers, sports activities or during outings.

7.3 Moral

Moral refers to appreciating the good virtues and self-worthiness that upholds the motto of UPNM which is Duty, Honour and Integrity. As an officer and a gentleman, a student must demonstrate good morals to be a role model to other students. The aspects of good morals to be emphasized are trustworthiness, just, patriotism, sacrifice, toleration and thankfulness. Besides that, moral also means showing enthusiasm when undergoing academic study and military training at UPNM.

7.4 Politeness

Good manners or courtesy is also a trait for an officer and gentleman or lady. Every individual or group activities need to be done

courteously. Good manners must be displayed by students both in the classrooms or outside the classrooms. The courtesy displayed by students will help to shape their character to hold positions in the MAF, Civil Service and private sector.

7.5 Good Virtues

UPNM students need to embrace many good virtues. Among the important ones, is to value time. Good time management is required to balance between academic study and military training. Students are required to be punctual for every routine such as attending lectures, training, prayers and complete assignments. As a leader, a student is required to be ready to face any challenges in the military training or co-curriculum activities.

7.6 Tenacity

Tenacity is an important attribute to achieve success in academic study and military training at UPNM. Tenacity can be defined as enduring effort and will to achieve a desire. For example, students need tenacity to graduate on time and commissioned into the MAF with minimum CGPA of 2.70.

7.7 Good Manners

Good manners are actions to sustain good morals among UPNM students. Good manners include politeness in their conversation or mutual respect even in an argument. The words spoken must be polite and be respectful of others. It is the responsibility of students to show respect to lecturers, military instructors and UPNM staff. Good manners must be displayed when interacting with the media and social network.

7.8 Discipline

Discipline is applied to students via daily orders and instructions to run the daily routine at UPNM. Given the responsibility to enforce discipline, a student leader needs to be firm, fair and virtuous in carrying out his duty. Students need to be exemplary by being obedient to orders issued by superiors. A student who disobeys orders will be punished accordingly to instill the discipline.

8. The Leadership Training for Bachelor Degree in Maritime Technology

To support the framework of LoC, the students of Bachelor Degree in Maritime Technology will undergo leadership training using a Ship Navigation Simulator. The simulator can create the real situation at sea for the students to exercise leadership practices onboard a ship. The simulator can be a platform to transfer knowledge and experience by a lecturer through psychomotor training. It will expose young students to the use of information and communication technology to enhance their job. In this context, students can practise the psychomotor and affective domain at the highest level. They are able to receive and respond to orders given by the instructor. The lecturer will ensure the objectives of the training are met by assessing the students' performance. Finally, the students will value the leadership training they had undergone to become future leaders of maritime agencies and industries.

The example of a leadership-training module at the Ship Navigation Simulator is to provide students with the leadership's skill to enable them to undertake the job as Navigation Officer onboard a ship.

9. Assessment Methodology for Leadership Training

In order to address the issue of graduates’ performance as a leader of character, the IHL must develop the assessment methodology in line with the needs of the industries (MOHE, 2015). The leadership assessment criteria must be developed to evaluate the student’s performance. The learning outcomes for the students in leadership training at the Ship Navigation Simulator are as follows:

- a. Leadership skills to perform the duty as Officer of the Watch and Navigation Officer.
- b. Ability to organise a ship navigation team to achieve the mission.
- c. Ability to communicate to members of navigation team.
- d. Ability in making correct decisions as a leader for the safety in navigation.
- e. Ability in critical thinking of appreciating the situation to avoid a collision.
- f. Ability to command and control the navigation team to achieve the mission.
- g. Ability to work in a team as a leader and instil moral courage to the members of the team.

The assessment shall include the grade, value point and marks to be awarded for the students’ performance. The lecturers are responsible to assess the students during the competency tests at the Ship Navigation Simulator. Before the assessment, students will undergo the training modules that includes the five taxonomy levels of affective learning in the Ship Navigation Simulator. The lecturer must use a standard rubric when assessing the students’ performance. An example of marks for assessment in the leadership training area in Table 1.

Table 1: An example of marks for assessment in the leadership-training module

	To practice the duty as a leader for entering or leaving harbor in the Ship Navigation Simulator	Marks
1	Leadership skills to perform the duty as Officer of the Watch and Navigation Officer	0 to 10
2	Ability to organise a ship navigation team to achieve the mission.	0 to 10
3	Ability to communicate to member of navigation team.	0 to 10
4	Ability in making correct decisions as a leader in accordance with the Standard Operating Procedures in navigation safety.	0 to 10
5	Ability in critical thinking of appreciating the situation to avoid a collision.	0 to 10
6	Ability to command and control the navigation team to achieve the mission.	0 to 10
7	Ability to work in a team as a leader.	0 to 10
8	Ability to instill moral courage to the members of the team.	0 to 10
9	Ability to give feed back to the members of the team	0 to 10
10	Ability to instill determination to achieve the mission of the team	0 to 10
	Total Mark	0 to 100
	Grade	E to A+

The lecturer shall use rubrics to award marks for the students. The rubrics for the students’ assessment is in Table 2.

Table 2: Rubrics and its Description

Excellence	10	Having very high leadership ability in doing the task. The performance is always above the maximum requirement
	9	Having very high leadership ability in doing the task. The performance are most of the time above the maximum requirement

Good	8	Having high leadership ability in doing the task. The performance is always at the maximum requirement
	7	Having high leadership ability in doing the task. The performance most of the time is at the maximum requirement
Satisfactory	6	Having moderate leadership ability in doing the task. The performance is always above the minimum requirement.
	5	Having moderate leadership ability in doing the task. The performance most of the time is above the minimum requirement.
Weak	4	Having low leadership ability in doing the task. The performance most of the time is at the minimum requirement.
	3	Having low leadership ability in doing the task. The performances is always at the minimum requirement
Poor	2	Having very low leadership ability in doing the task. The performance most of the time is below the minimum requirement.
	1	Having very low leadership ability in doing the task. The performance is always below minimum requirement.

10. Validity of the Student’s Assessment

Validity refers to the ability of a researcher to measure the value of an operational concept of a subject matter. Therefore, for the concept of student leadership, it shall be measured by assessing his performances in accomplishing a given task. To ensure the validity of the student’s assessment, the Royal Malaysian Navy (RMN) was consulted as an external validator and subject matter expert on leadership training programme for naval cadet. The top management of RMN were invited to observed performances of the students. The tasks carried out by the students were observed and found to meet the leadership requirement of the naval cadets.

A pilot test was then carried out to ensure the suitability and feasibility of the leadership training in the simulator. Among the objectives are to ensure suitability of the training module, the maximum number of students for each session, the criteria used for the assessment and the instrument of measurement for awarding marks for the student. Sixty students from the Bachelor Degree in Maritime Technology program and two facilitators from Navigation Science lecturers were involved in the pilot test.

Serial	Roles	Responsibilities
a.	Navigating Officer	Team leader
b.	Officer of the Watch	Assistant team leader
c.	Helsman	Member
d.	Radar operator (2 students)	Member
e.	Chart work	Member
f.	Throttle operator	Member
g.	Lookout	Member
h.	Radio operator	Member
i.	Tactical communication operator	Member

Number of students in a team is only ten for each training module

The pilot test found that majority of tasks is suitable to be carried out by the students. A few tasks were too difficult to be performed because students were lacking in experience on the jobs onboard a ship. The assessment criteria are able to measure the leadership’s traits of the students. The scale of 0 to 10 are suitable to be used to evaluate the students’ performance. The results of the students’ performances in the pilot test are shown in Figure 2.

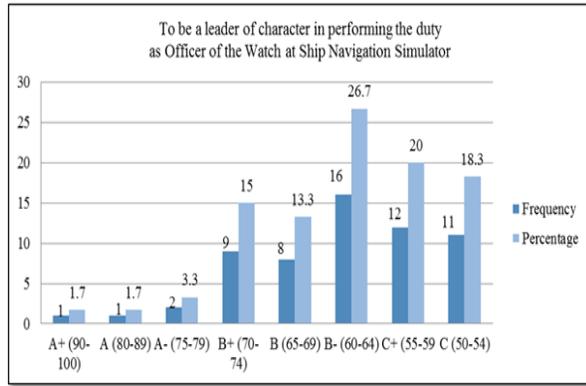


Fig. 2: Result of Pilot Test on Leadership Module

The results of the leadership module showed that 35% of the students passed with grade B and 55% of them passed with 60% and below. The result were accepted because the passing grade for all the subject in the Bachelor Degree in Maritime Technology is only 40% or grade D+. The results showed that the leadership module is suitable to be conducted using the Ship Navigation Simulator. The maximum number per session of training is 10 students only. Three facilitators were used to conduct the module and the rubrics used were reliable to measure the leadership’s traits of the students. The marks, grades and value points are found to be reliable in assessing the leadership of students by the three facilitators.

11. Results and Discussion

The assessment of the six attributes comes under the responsibility of the respective Academic Advisors. The assessment is carried out at the end of the semester for every academic year. Every person in the UPNM community is responsible to assist in implementing the framework of LoC for UPNM students. The implementation of this concept can be carried out during military training such as general military training, art of self-defence, single service training and regimental activities. The implementation can also be done during lectures, practical training in laboratory, industrial training, co-curriculum, sports activities and administration at the Faculty office, student affairs and Military Training Academy. The Student Affairs Department needs to conduct briefing, activities and module in the implementation of LoC. Nevertheless, the Academic Advisor is overall responsible over students under his supervision. Any criticism or advice on students need to be directed to the Academic Advisor for follow-up action. Based on the framework of LoC, all the six attributes can be assessed using radar plot as shown in Figure 3.

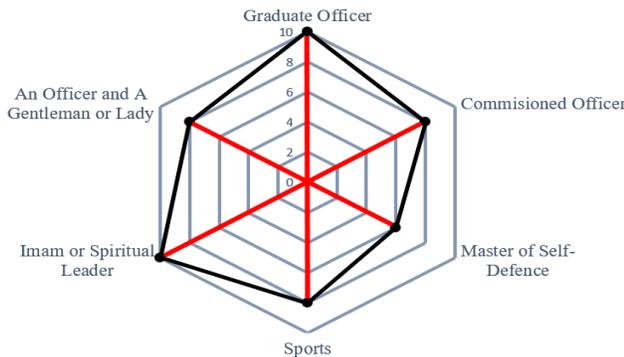


Fig.3: Radar Plot on the Assessment of LoC

12. Conclusion

The six attributes to mould LoC among UPNM students are graduate officer, commissioned officer, art of self-defence, sports-person, spiritual leader and officer and a gentleman or lady. To support the framework of LoC, the Bachelor Degree in Maritime Technology students will undergo the leadership training in the Ship Navigation Simulator. The methodology used for leadership training in a simulator is found to be very effective to develop the leadership characters for the students of Bachelor Degree in Maritime Technology. All UPNM staff comprising of lecturers, non-academic staff and military staff need to be involved for the successful implementation of the framework for LoC for UPNM students. All students need to pay attention to achieve the attributes of a LoC before graduating in their Bachelor Degree Programme. Successful students in the Bachelor Degree Programme would be awarded a Diploma in LoC. With the award of Diploma in LoC, it is believed that the stakeholders will have more confidence upon UPNM graduates.

Acknowledgements

This paper was written with the support of Cdr Tang Jut Weng RMN (Retired), Siti Sarah binti Mohd Isnain, Ainul Husna binti Abdul Rahman and Nur Afiqah binti Rosly. The authors would like to thank all representatives from Faculties, Student Affairs and Alumni Department, Military Training Academy, Reserve Officer Training Unit, Islamic Centre, and Sports Centre who provided assistance in producing the framework of LoC for the UPNM students.

References

- [1] Universiti Pertahanan Nasional Malaysia, (2014). *6 Elemen Intellectual Leaders Of Character*. [Online] Available at: <http://www.upnm.edu.my/index.php?req=112> [Accessed 24 October 2016]
- [2] Universiti Pertahanan Nasional Malaysia. (2016). *Falsafah Universiti Pertahanan Nasional Malaysia*. [online] Available at: <http://www.upnm.edu.my/index.php?req=d14&id=394> [Accessed 22 September 2016]
- [3] Kementerian Pendidikan Malaysia. (2012). *Falsafah Pendidikan Kebangsaan*. [online] Available at: <http://www.moe.gov.my/my/falsafah-pendidikan-kebangsaan> [Accessed 22 Sep. 2016].