Multicultural Learning in Maritime Higher Education: The Case of World Maritime University

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Abstract

This paper explores how a multicultural learning environment can affect the experiences of international students and help them to equip intercultural communication skills. The World Maritime University (WMU) is a postgraduate United Nations' (UN) specialised university in Malmö, Sweden. Its main programme is a 14-month MSc in maritime affairs in which approximately 130 international mature students from over 45 different countries enroll every year. While sharing common professional backgrounds within the maritime industry, students find this multicultural learning environment challenging yet interesting. To understand the multicultural learning impact on the students, the study was conducted by two qualitative methods: a focus group and observations. The participants emphasised the importance of shared spaces, such as a kitchen, in terms of deepening mutual understanding. Inspirations from different cultures brought some students positive experiences in intercultural communication and eventually built a sense of "family" among them. Such bonded relationships seem to be helpful to overcome various obstacles throughout the 14 months of their study. The paper concludes that the first couple of months are extremely important for international students to establish the foundation of their study. Positive experiences in intercultural communication tend to influence their proficiency in English as a common language as well as levels of satisfaction and success in their academic lives. It appears that the multicultural learning experience offered by WMU will help future maritime leaders to cultivate intercultural communication skills which can strengthen their confidence in advanced maritime technical knowledge and skills gained in the formal education.

Keywords: Multiculture, learning, Intercultural communication, Maritime industry

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Introduction

International shipping is a backbone of national economies in many countries to support the supply of food, goods, energy and other resources to the country and generate revenues from exports. The maritime industry is known as one of the most globalised industries, which requires a set of skills to deal with international affairs. Communication skills are particularly important as maritime professionals handle their day-to-day business matters through various means of communication.

English is globally recognised as the common language in the maritime industry. Seafarers learn so-called 'Maritime English' as a working language for ship operation. This occupational command of English has been adopted as the standard communication means by the International Maritime Organization (IMO). The global nature of ship operation is also reflected by multinational crew on board ships. It is estimated that approximately 70-80% of the world's merchant fleets are operated by multinational crews (Magramo and Cellada, 2009). Misunderstanding among multinational crew will lead to marine accidents; therefore, effective communication is important for safety. Today, ship operations are largely supported by the shore, including an e-navigation systems, vessel traffic control (VTC), and shipping companies' managing offices. Hence, intercultural communication in English is essential for maritime professionals both on board and ashore.

There are studies which have investigated the impact of multicultural crew on their communications on board. Sampson and Zhao (2003) conducted observation and interviews on board the multinational crews and found that a greater mixture of different nationalities would facilitate a mutual learning environment and seafarers tended to develop an understanding of each other's English. According to a survey research by Alfiani (2010), the majority of respondents agreed to the need for sufficient English literacy for professionals both on board and ashore. With good command of English, seafarers are likely to find it easy to communicate and interact within the mixed social community on board (Alfiani, 2010). Berg et al. (2013) reviewed literature on multinational crews and found that a majority of the literature concerns human errors through misunderstanding among the crew.

It is evident that very little research is found regarding shore-based maritime professionals' learning in the multicultural environment. In Québec, the maritime sector generates 12,300 direct jobs and 6,000 indirect jobs. Jobs on land (in ports and company offices) are twice as many as those on board ships (Fondation Monique-Fitz-Back and CSMOIM, n.d.). Considering that the population of shore-based maritime professionals is much larger than the one of onboard personnel, the need for training of shore-based maritime professionals for intercultural communication should not be underestimated.

This paper explores how a multicultural learning environment can affect the experiences of international students and help them to acquire intercultural communication skills. We look at the case of the World Maritime University (WMU), a postgraduate United Nations' (UN) specialised university in Malmö, Sweden. Its main programme is a 14-month MSc in maritime affairs in which approximately 130 international mature students from over 45 different countries enroll every year. Despite sharing common professional backgrounds within the maritime industry, students find this multicultural learning environment challenging yet interesting. This exploratory case study employs both a focus group and observations. Preliminary findings are presented, followed by conclusions and suggestions for future research.

Learning in multicultural environment

International students are defined as those students who left their country of origin for another country for the purpose of study (OECD, 2017). It is estimated that about five million students were currently studying outside of their home countries in 2015. This figure is a nearly 67% increase since 2005 and the world's population of international students is expected to reach eight million by 2025 (ICEF Monitor, 2015). As a result, a large number of international students contribute to create a multicultural learning environment in many higher educational institutions. An exposure to different cultures during the study period is becoming more common. In the future, more maritime professionals will be recruited from those graduates who study in a multicultural learning environment.

Many activities in international shipping involve communications with people from different countries where different practices and procedures may take place. Literature addresses the relationship between multicultural learning and communication skills. For example, Ochieng and Price (2009) examine how multicultural factors influence communication in a project team from Kenya and the UK and concluded that mutual trust and respect are essential. It is also noted that multicultural learning stimulates communication and enhances the motivation of learners to improve language skills, particularly English (OECD, 2017). A group of psychologists, Tadmor et al. (2012) found that multicultural exposure leads to a reduction in stereotype endorsement, symbolic racism, and discriminatory hiring decisions. These merits of learning in a multicultural environment are generally acknowledged. However, the literature also states that international students' needs are to be supported. Malau-Aduli (2011) studied the case of international medical students in Australia and concluded the importance of interventions at the point of entry, mid-way, and end of course. These include orientation activities, survival tips, tutorials, training sessions, information sessions, and support programmes. These institutional activities are indeed helpful. But students also come up with their own support systems by themselves.

Previous studies have investigated the role of social networks in the academic experiences of international students. McDowell and Montgomery (2008) studied a group of international graduate students at a UK university and found that the academic and emotional support they provided each other during their studies, and which they later extended to newcomers, was an important factor in their learning experience. The authors suggested that the international student group formed a *community of practice* as coined by learning theorists Lave and Wenger (1991). McClure's (2007) research on international graduate students' adjustment to a new multicultural learning environment similarly identified collegial support as a key coping strategy. Such student-driven support networks would be very helpful even beyond the campus and this spirit of cooperation is a crucial attitude to cope with professional challenges at work.

Skills needed for coping with maritime challenges

Traditionally the maritime industry has shared the common challenges of ensuring ship safety, security and environmental protection on clean oceans. Maritime accidents can cause casualties and serious damage to cargo and ship. According to the European Maritime Safety Agency (EMSA), the occurrence of maritime accidents on EU waters is estimated to be around 3,200 annually. Figures from 2016 show 106 reported fatalities, 957 persons injured, 26 ships lost and 123 investigations launched (EMSA, 2017). Some accidents even cause serious oil spills over the ocean, polluting the marine environment. When an accident

happens, it often involves two or more countries; for example, the shipowner comes from country A, the ship is registered to country B (flag state), the crew are multinational from country C, D, and E, the crewing agency is based in country F, the accident happened off the coast of country G (coastal state), and so on. It is obvious that shore-based maritime professionals have to negotiate with various stakeholders in multiple countries. A similar challenge will be encountered in maritime security issues, such as piracy and armed robbery. Piracy attacks peaked in 2010-2011, but the number of pirate attacks against ships worldwide was 180 in 2017 (Statista, 2018). To combat piracy, countries need to undertake good planning for coordination of their existing security mechanisms.

Country-to-country negotiation in maritime affairs is a daily routine in all the IMO member States. The related international conventions adopted at IMO are the instruments to regulate the industry. For example, the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 as Amended standardises the qualifications of seafarers for safe operation of ships; the International Convention for the Safety of Life at Sea, 1974 as Amended (SOLAS) sets safety and security standards; and the International Convention for the Prevention of Pollution from Ships as modified by the Protocol 1978 relating thereto (MARPOL 73/78) aims at preventing and minimising pollution at sea from ships and offshore units.

In addition to these traditional maritime challenges, contemporary issues are also being recognised. Energy efficiency is one of the hot debates in the maritime industry, which is under pressure to take effective measures to reduce the greenhouse gas emissions (Ölçer et al., 2018). Another contemporary issue is ballast water taken by ships. For many years, it has been recognized as a problem for the marine ecosystem; In 2017, the Ballast Water Management Convention finally entered into force. Ship recycling is also an important sustainability agenda in the maritime industry. The average age of ships sent for demolition is becoming younger from 24 years in 2015 to 18 years in 2016 (Ship & Bunker, 2017). Occupational Safety and Health (OSH) issues in the yards as well as environmental issues around the sites (including beaches) in major ship recycling countries like Bangladesh show a challenging example of how maritime stakeholders should take and share their responsibilities.

It is obvious that maritime professionals, not only onboard personnel but also shore-based ones, are required to plan, discuss, and negotiate day-to-day maritime affairs with people from different cultures. A high level of intercultural communication skills as well as leadership skills needs to be cultivated before entering the industry. However, the importance of such skills for shore-based maritime professionals is not well-recognised. It is partly because the maritime industry used to have a large pool of human resources who had seafaring experience before taking a job ashore. A career path for seafarers who worked at sea for more than 10 years and became a Captain or Chief Engineer is promising even after their sea services. The maritime industry benefited from ex-seafarers who can communicate with multinational seafarers and take leadership over the crew. Today, traditional maritime nations including UK, Japan, Norway, and Germany, are commonly experiencing the decline in numbers of national seafarers as a result of international competition to reduce human costs by hiring cheaper crew from developed countries, typically Philippines and Eastern Europeans. Hence, more attention should be paid to educating and training shore-based personnel with intercultural communication skills to supply sufficiently capable human resources to deal with more complex challenges in the maritime sector.

Methods

Under-recognised needs of intercultural communication skills among shore-based maritime professionals make it difficult to understand its value by a large survey or other quantitative research methods. Hence, this exploratory study employs a case study with qualitative analysis. The case of WMU fits the purpose as it literally presents a multicultural learning environment. The annual intake of WMU MSc in Maritime Affairs at Malmö Campus is roughly 130-140 students from 45-50 countries. Many of them live in the university dormitory during their 14-month study period. As of 2017, the WMU alumni account for 4.654 from 167 countries.

To understand the multicultural learning impact on the students, the study was conducted by two qualitative methods: a focus group and observations. A focus group is useful to gain an in-depth understanding of social issues, especially how students informally interact with each other and negotiate their different cultural norms and values outside the classroom. Krueger and Casey (2000) propose the involvement of two moderators working together and playing a different role within the same focus group. In this research one moderator who taught English communications in class focused on linguistic issues during the focus group; the other focused on cultural issues. This approach helped to listen to and analyse the narratives as well as to remove the bias of insiders. Observations in the classroom were used to capture the process of developing the students' intercultural communication skills. Such ethnographic method is particularly useful to analyse a community of learners over time.

A focus group was conducted before the WMU graduation in 2017. The participants were recruited through an email invitation. Five students originally from China, Colombia, Indonesia, Jordan, and Mozambique volunteered and all of them worked in shore-based offices in their home countries. The gender distribution was 4 males and 1 female. Observations were concentrated during the pre-sessional English and Study Skills Programme (ESSP) from mid-June to mid-September 2017 before the main MSc programme began. Further observations during the following 14 months were used as a reflection to verify the words expressed in the focus group.

The narrative data from the focus group was transcribed by the researcher. The data were coded and analysed using the qualitative research software, Nvivo. The following section presents preliminary findings.

Findings

This section presents findings, focusing on three main themes that emerged from the focus group discussion namely: forming social bonds, coping strategies and fostering leadership beyond academic responsibilities.

Forming social bonds

A strong theme to emerge was the formation of intercultural social bonds among WMU students, all of whom come to WMU from another country, and most of whom leave their families behind during their study period.

A number of participants noted that the classroom practices in the pre-sessional ESSP programme, notably the emphasis on collaborative learning through group work, were a

significant factor in the development of strong and lasting bonds between them. One participant noted:

The ESSP usually makes you to work as a team. It's not only the things that you will see to improve your skills. It's usually that ESSP classmates we are the most closest friends in the university ... I think this connection will never lost.

Another participant appreciated the opportunity that the programme provided him to interact with students from different countries:

...the system here encourage and push students to contact interact with each other ... when they divide the presentation groups, for example, you find yourself always with people from different countries.

Inspiration from different cultures, and seeking a sense of interconnectedness, brought some students positive experiences in intercultural communication and eventually built a sense of "family" among them. In fact, the participants from Indonesia, Jordan and Colombia all used the word "family" when describing relationships and interactions, including problem solving, among WMU classmates:

I think in the ESSP we are all one family.

We're a family - it's like when you have a family - you have your kids and you have to talk with them and they will express what they think, you will express what you think and those thoughts, we will achieve something all together.

When family have a problem, we solve the problem with talking.

The concept of shared space beyond the classroom was revealed to be a significant aspect in the creation of social bonds and deepening mutual understanding among the participants and their colleagues. In particular the shared kitchen in the student residence was emphasised as a place where students could live together as a family despite possible cultural differences. One student expressed as:

In the culture of things maybe I have some cultural demands in my culture. [participant] too, he is from Colombia, [participant] is from China we have the same things. But it doesn't mean that we can't live as one family. In the new Wing at HSR (dormitory) when we cook okay because we share the same kitchen. And this is really one of the benefits for us. Because when we cook something, there's someone from the Philippines, someone from Japan, someone from Korea, someone from Colombia. And when I cook something, we have learned by practice. When I cook something, "Okay come on come on". And they cook something, "come on come on" and you always find a variety of foods to eat.

The shared kitchen space is seen as integral to survival away from home and evidence of the friendship bonds and emotional support among students:

In our floor, we build one strategy to survive. When we don't see someone in the kitchen, we go to knock their door, "Are you okay?"

Overall, participants stressed the importance of social interaction. Living and studying together in a multicultural environment, away from their families, placed the participants in this study and their colleagues in a number of shared spaces. Sharing these spaces gave them opportunities to form strong and lasting social bonds and to develop intercultural communication skills. Such bonded relationships seemed to be helpful to overcome various obstacles throughout the 14 months of their study.

Coping Strategies

Another significant theme to emerge from the focus group data was coping strategies. In addition to the emotional and psychological challenges associated with being away from home and family for an extended period, participants described the linguistic and academic challenges they faced in their course of studies and identified some strategies they used to cope with these problems.

Many of the academic challenges experienced by the participants were linked to language and cultural differences in academic conventions. Participants reported that, prior to arriving at WMU, they were unfamiliar with or lacked strategies for structuring academic essays, writing paragraphs, avoiding plagiarism, and citing sources. They coped with these challenges by using strategies learned and practised in the ESSP, by developing their own strategies and by helping each other, which led to further development and strengthening of social bonds. A number of participants reported using academic skills developed in the ESSP to cope with assignments in the main programme:

It's difficult for us to change our way of writing ... but with the ESSP, we have improved well our skills.

For us, because we attend the ESSP class, I have to say that I have never faced any difficulties to my study after the ESSP. For the assignment I have learned a lot how to write my assignment, what the professor wants.

Some participants eventually developed their own coping strategies to succeed in their studies. One reported changing strategies mid-course after receiving poor results on assignments.

I wrote my dissertation in Portuguese! Because thinking in English was completely problem for me (...) but No, because I used my strategy - I changed completely my strategy.

A significant aspect of the data collected suggests that helping each other cope academically is a way for students to develop and strengthen social bonds amongst themselves. One participant described helping another prepare for an oral exam:

One of the most important things for students is how to build close relationships with some people ... For example, a beautiful thing that I'll always have in my mind - yesterday night - I have nothing -[Colombian participant], he have oral exam - today actually - ... he come to my room and we sit, we drink tea, and he - the one who has the oral exam - and we was discussing about the information on the exam and we share it. And we always do the same thing.

New students joining the MSc programme were helped to adjust to the learning environment by ESSP students through sharing of experience, advice and learning materials:

Overall in the culture we are just so lucky we have ESSP Program and also some of my friends who did not attend the ESSP, they ask first-time assignment, for example, how to make a good conclusion, a good introduction. I just give the material from the ESSP.

Participants also reported asking for help from the newcomers who were more proficient in English:

My classmate from Kenya - the official language is English - yes - so after finish my assignment, I just go to her room, "please try to help me - let's correct this" because most of us we have bad marks not only for knowledge but grammar - the grammar itself is another problem. So she try to correct some and after that I submit. It's another point of having friends here - being close to people here, to share.

Relationships built on mutual support appear to be a key factor in coping with academic challenges in a multicultural environment as well as the stress of being away from home and family.

Fostering leadership beyond academic responsibilities

The focus group discussion for this study took place two weeks before the participants graduated from WMU. Reflecting on their 17-month¹ study period, several participants were eager to use the experience and knowledge gained in the MSc programme to engage proactively in improving the University and the maritime field in their respective countries. The participants seemed to already view themselves as members of an international community of WMU alumni, with responsibilities and leadership roles that extend beyond graduation and into their professional lives.

An important step in becoming an active member of a community is to understand the rules of its membership. It was important to one participant that professors and students share an understanding of the University's policies, that they "speak the same language" from the start.

Something important that all the students might not know is the policy of the University or this is the code of honor ... which is the right thing. Everybody has to understand that. And everybody has to apply it. (...) If it is important we have to spend time on that, and to explain and to tell them what is the fact, what are the obligations of the students, of professors, and we will talk in the same language.

Others viewed social interaction and group involvement as not only a support mechanism and coping strategy, but as a means to effect change within the university and beyond. All of the participants agreed that group discussion involving students and faculty was the best way to solve problems and work toward improvement, with two noting:

¹ Pre-sessional ESSP programme for 3 months and MSc course for 14 months.

... each two months in the auditorium ... a panel like this, you know with some professors, some staff, all the students to discuss things. It's really helpful because you know, it gives a positive environment.

...sharing with the students how you can improve better, they can give some advice, some knowledge, because they come from other countries and maybe they have bigger projects, investigation studies, so maybe something can come from their input.

Another expressed an interest in taking a more direct role in improving the university for future students by suggesting group discussion rather than the usual online questionnaire as a means of evaluating courses and faculty.

It's better the professor after the teaching give some time maybe one hour about the feedback discussion, not with the questionnaire. It's just better for us because with talking to the professor about the feedback ... it's better for the improvement in the future.

In addition to involvement within the university, participants aspired to use their knowledge and experience to solve problems in the maritime field in their own countries. The Jordanian participant described an initiative he took within his own administration to promote the involvement of women in response to a course assignment on women in maritime administration.

...and from two months they start a new strategy to announce about the scholarships especially for women to encourage them, because we have a lot of women, and they want to come, and they have a good English language. And this is one of the things that I am proud that I have done this from my study.

These suggestions and leadership initiatives by members of the focus group show a willingness and desire to lead for a positive change in the maritime industry.

Conclusion and suggestions

This study used a qualitative approach to explore the ways in which a multicultural learning environment can affect the learning experiences of international students and help them to acquire intercultural communication skills. The major themes identified by the study were the formation of social bonds, development of coping strategies and the fostering of leadership beyond academic responsibilities.

The ESSP was found to play a strong role in providing students with the necessary English language and academic skills to cope with the demands of the MSc programme. However, a further benefit of the program was discovered to be its facilitation of social networks among the international students through its collaborative, task-based learning approach with an emphasis on group work. The students who participated in this programme seemed to form lasting intercultural friendships, and continued to support each other emotionally and academically throughout the MSc programme. They further extended their social networks to the newly arriving students, sharing advice and coping strategies. In particular, the concept of a multi-cultural "family" away from home was found to be a significant coping factor for the participants in this study and the availability of such a support network influenced their level of satisfaction and success in their academic lives.

The research also found that as the students adjusted to the multicultural learning environment and advanced in their studies, they were eager to use their knowledge and experience to benefit future WMU students and the maritime industry in their respective countries. Particular emphasis was placed on the need to work together to solve problems and effect improvements. The leadership initiatives suggested and taken by the members of the fucus group seem to indicate that the multicultural learning experience offered by WMU will help future maritime leaders to cultivate intercultural communication skills which can strengthen their confidence in advanced maritime technical knowledge and skills gained in the formal education.

This study focused on a small group of students at the end of their study period. In this sense, it was limited to their hindsight observations. Further research is suggested to take a longitudinal approach by gathering data before and after the ESSP and MSc programmes. Comparative studies between ESSP and non-ESSP students, by region and by gender are further recommended. Future research could also identify and apply methods to assess intercultural communication skills and the impact of multicultural education on their development.

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