# GLOBALIZATION, MARITIME EDUCATION, AND STUDENT EXCHANGE PROGRAMS

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### Abstract

As maritime universities across the world recognize the profound impact the forces of globalization have made on maritime industries, they've taken measures to educate students on issues of global interconnectedness. One way to further develop cross-cultural understanding and economic interdependence is to improve student exchange opportunities between maritime universities: while most institutions have student exchange programs in place, there are many impediments to their efficient functioning including complex and ambiguous financial contracts, the evaluation and transferal of academic credit, academic calendar alignments, STCW requirements, and additional administrative and governmental obstacles. The exchange of students between maritime institutions should be more efficacious, and via the institutional frame and authority of the IAMU, provisions can be made to streamline the process. Not only should student exchanges between maritime universities be encourage and cultivated, but the methods by which these programs are implemented should also be standardized.

### I. INTRODUCTION.

Last October, the IAMU Presidents'/Rectors' Forum issued "The Dalian Statement" (2006) which asserted, in part, that "globalization has been progressing rapidly in the international shipping arena" and therefore "passing on maritime skills and knowledge to the following generations needs to be achieved on a global scale." Furthermore, a collective objective of maritime education around the world, this group maintains, should be to "prepare and develop standardized undergraduate curricula and an International Certification System for Competency" (The Dalian Statement 2006). For some time now, maritime universities have been attuned to the social, cultural, and political forces of globalization, and organizations such as IAMU work to disseminate

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ideas within a global arena. Maritime education now incorporates theories and practices of globalization into various courses, and students may also visit foreign ports of call during sea training periods which help to develop a multicultural perspective. One way to further develop cross-cultural understanding and to work toward the aims outlined in The Dalian Statement is to increase and strengthen student exchange opportunities between maritime universities. If students have the opportunity of studying abroad at different institutions, their knowledge of the world, and their position within it as future maritime industry professionals would be vastly improved.

Given the multilingual, multi-ethnic, multinational makeup of the majority of crews in the maritime industry, and given the obvious internationalist nature of maritime security, oceanic politics, and maritime environmental policies, it has become imperative that maritime education do what it can to reduce the communicative complications that may arise in such working conditions due to cultural difference. I have written elsewhere that problems in cross-cultural communication have significant and far-reaching implications regarding safety, security, and economic production, and a means by which to circumvent such problems is to "embed a knowledge of cultural difference in the classroom -- to make the study of the cultures of globalization a core component of the maritime curriculum (Benton 2005 p. 349). If we agree that this is a worthwhile and valuable goal then we must recognize that enabling our students to spend a semester or a year at another maritime institution is one way to reach this objective. According to The Institute for the International Education of Students, in the first large-scale survey to explore the long-term impact of study abroad on a student's personal, professional, and academic life, it was found that "study abroad positively and unequivocally influences the career-path, worldview, and self-confidence of students (Dwyer and Peters 2004). Besides improving students' confidence and enhancing their interest in academic study, "when questioned about intercultural development, 98 percent of respondents said that study abroad helped them to better understand their own cultural values and biases, and 82 percent replied that study abroad contributed to their developing a more sophisticated way of looking at the world" (Dwyer and Peters, 2004). Moreover, the researchers add, "it is significant to note that these intercultural benefits are not fleeting but continue to impact participants' lives long after their time abroad. Almost all of the respondents (94 percent) reported that the experience continues to influence interactions with people from other cultures" (Dwyer and Peters 2004).

Maritime education and training is committed to the practice of "experiential learning" – to gain knowledge via hands-on practice through the use of simulators, training ships, and other technologies and pedagogical methodologies. If we are truly committed to transnational cooperation, then developing and enhancing student exchange opportunities must be seen as another powerful example of "experiential learning." Indeed, participating in a study abroad program may exemplify the highest order of experiential learning in that a student's entire consciousness is engaged every day by working and socializing in a foreign country at a foreign university: the very act of "studying abroad" itself constitutes a personal, geographical and intellectually transformative experience.

# 2. PROBLEMATIC ISSUES IN STUDENT EXCHANGE PROGRAM IMPLEMENTATION.

Despite the obvious value of student exchanges and study abroad programs, they are often difficult to implement for a number of reasons. Many of these difficulties stem from the complex negotiations that need take place between two independent academic institutions (difficulties of a universal nature); and other problems surface because of the unique and specialized nature of maritime education itself (difficulties of a specific nature). Before proceeding it should be noted that this essay is concerned primarily with international educational opportunities for non-matriculating students and specifically bilateral exchange programs wherein two institutions agree, usually through a Memorandum of Understanding or other formalized contract, to exchange an equal number of students for an equal amount of time. While other study abroad opportunities exist - including full matriculation at a foreign institution - these often have very different admission structures and strategies. Even within the category of the bilateral student exchange program, however, there are often confusing or ill-defined procedures, in part because agreements and memorandum of understanding between two institutions are so ambiguous that they provide little information regarding procedure. This ambiguity is deliberate because it allows the two maritime universities entering into a student exchange to map out their own expectations and requirements, but this also places excessive administrative burdens on an institution every time it seeks to broaden its study abroad opportunities, or when new regulations or requirements are mandated from federal or university-level governing bodies.

#### 2.1. STUDENT FEES: BILATERAL VS. UNILATERAL EXCHANGES.

Financial relationships between students, their maritime universities, and their nations are complex, individualized, and cannot easily be adjusted for international partnerships. Generally, in a bilateral one-to-one exchange, a student from one maritime university wishing to study at another would pay his or her student fees, including room and board, to the home institution, not to the host school. Or, the student pays tuition to the home institution but room and board fees to the host institution. In other situations, a student may have to pay international student fees to the host institution while also paying fees to his or her own institution. If a university has an exchange agreement with several or even dozens of other universities, and if each of these agreements has a different financial structure, then accounting practices become extremely knotty.

The issue is compounded, however, when two universities cannot exchange an equal number of students for an equal length of time. Oftentimes, a school will wish to send two, three, or four of its own students abroad to a specific maritime university which in turn can send only one of its own back: the financial inequity of such a unilateral exchange becomes a concern. Maritime universities across the world have widely divergent student populations and enrollment figures. If we wish, say, for 2% of the undergraduate student body to study abroad for a semester or a year, and given that entering and exiting students generally don't participate, at a four-year institution that leaves just 2<sup>nd</sup> and 3<sup>rd</sup> year students available. At Cal Maritime -- a relatively small school – this amounts to less than ten students. We currently have student exchange relationships with thirteen other maritime academies and thus our supply cannot meet demand. Furthermore, in cases where student education is heavily subsidized by the nation's government (and especially in institutions with impacted enrollment) admitting international students unilaterally without charging student fees is a difficult practice to condone in fiscally-stringent times. It must also be acknowledged that each student often utilizes several different financial resources to pay for education: personal or family savings, government scholarship, government loan, private loans, individual scholarships, etc., and each revenue stream has stipulations as to how the money may be spent – some of which prevent the student from attending classes in an institution different from that which the money was assigned. Yet to deny these students the opportunity to study abroad arguably amounts to economic discrimination.

#### 2.2. Academic Calendar Incompatibilities.

Periods of study from one maritime institution to another do not line up neatly, thus creating problems with curriculum and enrollment management. For example, most U.S. maritime universities run on a two-semester academic calendar from September to December and January to April; Dalian Maritime University's academic calendar runs September to January and March to July; The Australia Maritime College's semesters run from February to June and July to November. A student wishing to study abroad for only one term would have to begin after the semester has started or leave before it has finished in order not to adversely affect attendance for the next term at the home institution. A student wishing to study for a year may also discover scheduling conflicts with sea time on a training ship. Missing days or weeks of coursework (especially if it falls at the end of a term) has wave-like detrimental repercussions: missing course work and/or exams can lead to lack of course credit or STCW certification, which in turn may delay graduation. Foreign students wishing to register for courses late or withdraw early at their host institution also place burdens on individual faculty who may not be

able to accommodate such flexibility in their curriculum plans. And obviously, many courses are designed for incremental skill-set acquisition with final exams used as assessment tools: to miss the beginning or end – especially if the foreign student must also grapple with a new language and new culture – makes mastery of a given subject nearly impossible.

#### 2.3. TRANSFER OF ACADEMIC CREDIT.

Differences in curriculum, unit measurement, accrediting bodies, and grading protocol make it troublesome for students to receive credit for courses they have taken at different institutions. Bracketing for a moment the issue of STCW requirements, all institutions are accredited in the county in which they reside, and regulatory bodies often prohibit (or at least make it very difficult) to transfer credit from one differentlyaccredited body to another. Also, units of study are measured differently: is a three-unit course in maritime engineering in America equivalent to the same in Asia? Furthermore, student evaluations are frequently recorded in different scales: most prevalent in the United States is a 4.0 scale, but a 5.0 scale is used in Russia, with some European and South American universities using a 6.0 scale, a 10.0 scale, or a 20.0 scale, and others using The European Credit Transfer System. Who then, ultimately decides credit and course grade equivalency? Generally, in order for a course to be transferred, it must be equivalent in three areas: course content, course level, and unit value. In reaching equivalencies, it may even be necessary to separate and/or combine elements from different courses given by the host institution. These are issues that face any university that offers an international study abroad program. Larger institutions, however, also have resources to assist students in integrating their coursework overseas into their home campus degree programs. The Office of International Programs of the California State University system, for example, evaluates, translates, and reports on student work done at the host institution. This office also evaluates courses taken abroad and with deliberate consideration and analysis determines the equivalent course at the student's home campus. This process requires the examination of student transcripts, academic advisement forms, campus catalogs, course syllabi, etc. (Office of International Programs 2007). No such office exists within the maritime university community to authorize such determinations.

#### 2.4. MET AND STUDENT EXCHANGE.

The aforementioned issues of credit transfer are exacerbated by the particular characteristics of maritime training. The '95 STCW Convention carefully identifies and categorizes a number of components necessary for the acquisition of a license, but it doesn't explicitly delineate *how* those components should be integrated into a curriculum. Thus, maritime universities may comply with the ends of STCW regulations but do so by very different means, with different components covered in different courses, in different sequences, with different unit measurements. To take just one marine program for example, in his study of marine engineering curricula Boris Butman found that "in spite of the substantial efforts of the IMO and the maritime community aimed at developing standardized curriculum for training ship officers, the educational programs in different institutions vary quite substantially. Undergraduate marine engineering programs offered in various countries differ in their duration, content, onboard training, [and] specific requirements" (2005 p. 19). Furthermore, the distribution of time among the various portions of a program and the list of academic courses varies quite substantially from country to country, and even among different schools from the same country" (2005 p. 19). Without venturing to assess the strengths or weaknesses of one curriculum over another, it is evident that the non-standardization of maritime curricula from school to school presents additional challenges to the student wishing to transfer academic credit back to his home institution.

Likewise, sea training is another unique aspect of maritime education which opens up additional opportunities for student exchanges. If students are unable or unwilling to spend a year or a semester abroad, perhaps more programs could be developed which make use of a host institution's training ship. Such an exchange is not unfeasible, but is subject to all of the issues already raised, with additional concerns regarding space availability, seamless integration into shipboard duties, ports of call and foreign visa complexities, and additional financial expenditures.

#### 2.5. Additional Student Exchange Issues.

An effective International Exchange Program faces many administrative challenges, and there exist several other complexities that are related to, but expand beyond, the potential problems articulated above.

First, language barriers hinder cross-cultural communication: students who do not have a strong command of the language used in course work at the host university are severely challenged. Even if students wish to develop and increase their language skills (a noble pursuit which should not be dissuaded) the possible damage done to their grade point average, especially as this may impact academic standings and even career aspirations, may discourage them from applying. Students who are less than fluent in a foreign language often feel marginalized and disenfranchised by fellow students, instructors, and administrators.

Second, federal government-level paperwork regarding immigration and visa acquisition adds an additional level of bureaucracy to student exchange programs. It is ironic that the very threats to global stability which make interaction between the world's students so important also result in so many reviews and document requests. In the United States, for example, post 9-11 legislature requires all student exchanges to be processed through the Department of Homeland Security, (DHS) via the Student and Exchange Visitor Information System (SEVIS) which then enables the submission of designation applications to the Department of State (DoS). Only once the student has been cleared by these agencies will he or she be granted a visa. The time needed for this to occur can take months, thus a student exchange process must be planned well in advance.

Finally, the very nature of an exchange program requires input and approval from many different university departments, offices, and bureaucratic entities. A successful exchange of just one student demands participation from an Admissions Department (does the incoming exchange student have the appropriate intellectual skills?); the Housing Coordinator (is there a dormitory room available for the incoming student? Does the student require special living arrangements because of cultural or religious beliefs? Likewise, are there dietary restrictions that might present problems?) Also involved are Records Departments and enrollment management personnel, specific Academic Departments and academic advisors (what classes does the incoming student wish to take? What courses is she or he qualified to take? What if those classes are full or unavailable? Who is to advise these students?) And, for students planning to study abroad, who will advise them from their home university on classes to take? What if their current advisor has no knowledge of the host university curriculum? Will they be assured of housing upon their return? There are numerous other questions: is there specialized mentoring or an orientation that is needed or desired? Are there health insurance requirements? Who is to pay for these? Is there legal assistance available for the exchange student should the need arise?

Not only, then, are several – perhaps dozens – of departments, agencies, and individuals required to process even one student's single semester exchange, but these entities must be carefully choreographed and calibrated to work quickly: if one step of the process is delayed – confirmation of available housing, for example – then months of work on behalf of others (not to mention extreme disappointment on the part of the student), may be for naught.

The amount of work, therefore, needed to process exchanges is daunting, and universities strapped for human and economic resources may be understandably reluctant to pursue and expand such programs. The rewards of a student exchange program are great, however, and to simply narrow or limit the international opportunities available in maritime education and training is counterproductive in the age of globalization. Some proposals in the following section suggest how the process may be made more efficient, and how the International Association of Maritime Universities may help in this endeavor.

# 3. Student Exchange Program Proposals and Recommendations.

The exchange of students between maritime institutions should be more efficacious, and via the institutional frame and authority of the IAMU, provisions can be made to streamline the process. Not only should student exchanges between maritime universities be cultivated, but the methods by which these programs are implemented should also be standardized (thus fulfilling one of the objectives of The Dalian Statement).

First, each university should identify a chief international student exchange officer, or at least a designee specifically for maritime university exchanges. The larger institutions may have entire staff and resources devoted to international study, but at smaller institutions, it is not always easy to identify the appropriate personnel. One is left wading through pages of web-based material, often with poor language-translation software, or one is left to peruse university catalogs hoping to alight on the right contact person. Certainly, most institutions have several people and/or distinct entities that engage with international issues related to education, but student exchange programs are housed differently in different institutions. Some schools have a dedicated Office of Student Exchanges; others umbrella these programs within an International Education office, still others house them with admissions, or student affairs, or even individual academic departments.

This chief international officer then would work with those important intramural affiliated departments mentioned in the previous section (admissions, records, academic affairs, housing, etc.) *and* with other intercollegiate maritime university international officers to both increase study abroad opportunities across the IAMU and to make the process more efficient. Possible charges to this international student exchange working group may be to:

- Compile data on all IAMU member institutions that currently have Memoranda of Understanding with fellow IAMU member institutions with provisions for student exchange.
- Analyze the consistency of the language and requirements of those memoranda and seek strategies to standardize, as much as possible, the exchanges. This should not be construed as an attempt to wrest autonomy away from each individual academic institution, but rather as a means by which we can move toward a more globalized and uniform curricula.
- Seek to expand (with proper institutional input and approval, of course) the number of maritime universities willing to participate in student exchanges. These new exchange programs could be modeled on the revised and standardized programs aforementioned. As of this writing, there are 45 member institutions. It not so very hard to imagine a day when a student at any given IAMU

institution would have the opportunity to study at any other IAMU member institution.

I would also suggest that should this working group get formed, additional energy be directed toward developing a document – a separate catalog under the aegis of the IAMU, perhaps, or a subset of the catalog of each participating member institution, that clearly sets out the following in regards to student exchange:

- A list of courses (including the language with which it is taught and the appropriate pre-requisites) within each department or area of study that may be taken at the host institution, with a clear understanding that these courses can be transferred back to the home university for credit.
- A grade equivalency matrix for all participating universities.
- Additional guidelines if necessary on course-load restrictions or obligations, academic advisement forms, language requirement forms, etc.

This group would work with all the assorted parties on their respective individual campuses to resolve issues of financial expenditure and academic affairs, and this group could also work together online, to share ideas and disseminate information with which to usher in a new era of maritime education collaboration.

## 4. CONCLUSION

In the words of the IAMU Honorary Chair Yohei Sasakawa, "globalization has been accompanied by the rapid internationalization and multi-nationalization of maritime activities and problems," and "in order to solve emerging issues related to the sea, we need to reform the traditional system of the maritime community in which each government basically acts as an individual...There is an urgent need to ensure not only a high level of education, but also a uniform curriculum for all students" (Development for a New World Maritime Community 2006). Facilitating student exchanges between maritime universities is a step toward this goal: the rewards in developing an interlocking, systematized structure are enormous; the risks in not doing so are grave.

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