Making a Splash in the Classroom:
Maritime Education in Non-Licensed Majors

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The historical foundation of American maritime education has been the licensed-track programs that grant future mariners a Third Mate or Third Engineer license after successful completion of the United States Coast Guard (USCG) Examinations. While this foundation will not change into the future, some maritime academies have begun to offer educational opportunities to cadets in the "shoreside" fields of maritime policy and management. Over the past decade or so, the California Maritime Academy, CSU (Cal Maritime) has undergone institutional evolutionary processes that resulted in the formation of the ABS School of Maritime Policy and Management that houses two non-licensed majors – Global Studies and Maritime Affairs (GSMA) and International Business and Logistics (IBL). Faculty in the emerging field of shoreside maritime policy and management education face distinct challenges rarely found at "traditional" universities. While licensed-track faculty enter their teaching career at a maritime academy having many years of experience as a mariner and up-to-date USCG licenses, non-licensed track faculty in degree-granting programs such as GSMA often enter their teaching career at a maritime academy with little or no training or experience in the maritime world. The overwhelming majority of faculty in shoreside programs and majors come from a traditional post-secondary education where the maritime world appears as no more than an occasional case study. In this paper, I describe my experiences incorporating the maritime into traditional courses and developing new social-scientific courses in maritime policy and institutions. The results of the paper and presentation offer insights into how maritime academy professors in non-licensed majors, after being trained in traditional social science doctoral programs, are able to successfully make a "splash in the classroom."

Keywords: maritime, education, shoreside, non-licensed, faculty, curriculum, pedagogy

Introduction

Many nations around the world have a long history of educating and training a merchant marine workforce well-prepared to sail merchant vessels during peacetime and, if the need arises, during wartime. In the United States, the tradition of merchant mariner education and training is carried on by six state maritime academies and the federal United States Merchant Marine Academy (USMMA). Until recently, these maritime academies have been defined almost exclusively by a corps of cadets all seeking a United States Coast Guard (USCG) license along with their bachelor's degree upon graduation. However, just over a decade ago the California Maritime Academy, CSU (Cal Maritime) began admitting cadets that would only seek and bachelor's degree and not an accompanying USCG license in new majors not traditionally offered at maritime academies. The institutional expansion of Cal Maritime in offering shoreside (or "non-licensed") majors has led to significant growth in both the corps of cadets and faculty populations on campus. It also generates challenges for new faculty teaching in shoreside majors as most come from traditional doctoral programs that do not have a specific maritime focus. In this paper, the author describes the challenges facing new faculty in shoreside majors emerging at a handful of maritime academies around the world, details personal experiences in the process of incorporating the maritime into traditional courses and developing new courses within a shorside maritime major, and offers insights into how new faculty in shoreside majors might successfully incorporate the maritime into their pedagogical evolution and course offerings.

Traditional Maritime Academy Education

The historical foundation of maritime education has been licensed track programs that grant future seamen a merchant mariner license upon successful completion of coursework and culminating examinations. In the case of merchant mariner education in the United States, the traditional maritime academy model has been the granting of a bachelor's degree and either Third Mate or Third Engineer license after successfully competing all coursework, Standards of Training, Certification, and Watchkeeping (STCW) requirements, and USCG examinations. In the overwhelming majority of licensed majors such as Marine Transportation or Marine Engineering Technology, faculty members hold all appropriate licenses and have a great deal of experience working in the maritime industry as captains, mates, engineers, and the like. Nearly all faculty in licensed majors are teaching courses in subject matter areas directly related to their lifelong training, prior careers at sea, and current standing as licensed seafarers. This structure, of course, is both appropriate and necessary as licensed faculty are training future seamen for careers at sea that require instructors to have the credentials and background to provide high both quality education and industry-specific training. The model for licensed majors and programs has not only been structured in the most appropriate manner, but it in almost all cases it has led to the production of well-trained and highly qualified new maritime industry professionals.

In addition to traditional licensed majors, some maritime academies have offered various "licensed-optional" engineering-related bachelor's degrees such as mechanical, electrical, and facilities engineering and naval architecture. Other academies have offered marine science-related degrees such as marine biology, marine environmental science, and marine fisheries that do not require a license upon graduation. While many of these programs do have a non-licensed option or do not have a license option at all, they fall outside the purview of this paper that focuses on faculty development in emerging shoreside majors that have a distinct non-vessel and non-marine science maritime industry focus such as maritime policy or international business and logistics.

Non-traditional Maritime Academy Education

At several maritime academies around the world, a new institutional model is being implemented that is expanding the scope of maritime academy education. In addition to traditional licensed majors, a number of maritime academies are now offering non-licensed, or "shoreside," majors that culminate in the conferring of various bachelor's degrees with no associated merchant mariner license. In the United States, several of the state maritime academies now offer shoreside majors where successful graduates do not receive a USCG license. A summary of non-licensed, non-engineering and non-marine science oriented majors currently offered at maritime academies in the United States is found in Table 1 below.

Table 1: Non-licensed majors offered at maritime academies in the United States

Academy name	Non-licensed majors offered
California Maritime Academy	Global Studies and Maritime Affairs International Business and Logistics
Maine Maritime Academy	International Business and Logistics
Massachusetts Maritime Academy	Marine Safety and Environmental Protection Emergency Management International Maritime Business
SUNY Maritime College	International Transportation and Trade Maritime Studies
Texas Maritime Academy	Maritime Administration Maritime Studies University Studies

As is evident in Table 1, the number of shoreside majors and degrees offered by maritime academies in the United States is rather limited when non-licensed engineering and marine science programs are not included. In most cases, these academic programs are relatively new and just beginning to grow, particularly in comparison with their licensed counterparts. It is clear that the need for growth in the overall student populations of maritime academies where traditional licensed majors are growth-limited on the basis of required facilities alone is an important component of the move towards shoreside majors that can be taught for the most part in a traditional classroom setting. Licensed programs are built on a large volume of hands-on training, much of which is STCW-required, that necessitates the use of radar and bridge simulators, engine rooms, training vessels that can only hold a limited number of students at a given time. Thus, increasing the student populations at maritime academies around the world will increasingly be generated by more non-licensed degree programs that allow for more students learning environments not limited as dramatically by available facilities and STCW requirements. However, the emergence of these shoreside degree programs that focus on issues such as maritime policy and management, international business and trade, logistics and supply chain management, and maritime history, archaeology, and culture in the case of Maritime Studies and the Texas Maritime Academy, can present significant challenges to new faculty at these institutions teaching in shoreside degree programs.

Faculty challenges in non-licensed majors

New faculty teaching in shoreside degree programs at maritime academies face a handful a significant challenges in the early phases of their careers. Faculty in the emerging fields of shoreside maritime policy and management, maritime studies, and international business and logistics education face distinct challenges rarely found at "traditional" universities. While licensed-track faculty enter their teaching career at a maritime academy having many years of experience as a mariner and up-to-date merchant mariner licenses, non-licensed track faculty in degree-granting programs such as Global Studies and Maritime Affairs (GSMA) at the California Maritime Academy (Cal Maritime) often enter the academy with little or no training or experience in the maritime world. The large majority of faculty in shoreside programs and majors come from a traditional post-secondary education where the maritime world appears as no more than an occasional case study. Of course, a caveat would be faculty in the fields of logistics and supply chain management who are undoubtedly familiar with and have a deep understanding of the importance of shipping and merchant vessels to their fields. However, many instructors in non-licensed programs do not enter their maritime teaching careers with a level of foundational, maritime-specific knowledge that is critical to successful student learning. In most cases, this knowledge and subsequent classroom application must be learned and pedagogically developed. Apart from the obvious need to learn a great deal about the maritime world and specific maritime issues relevant to the instructors field of study (which is such a basic and assumed requirement of the faculty position that it is not discussed in detail here), the way in which the acquisition of knowledge of the maritime world is then incorporated into courses and potentially built into the program curriculum is neither simple or obvious. Below, the author, having entered a teaching career at the California Maritime Academy in GSMA from traditional undergraduate and doctoral education in political science, discusses and analyses personal experiences and individually successful strategies for incorporating the maritime in the classroom early on that eventually led to the creation of several new maritime-specific courses now required in the major.

Bringing the maritime into the shoreside classroom

As mentioned earlier, the first and most obvious step in transitioning from a "traditional" scholar and instructor found at almost every university in the world to a maritime academy faculty member in a shoreside major is a commitment to learning as much as possible as fast as possible about the maritime world. This aspect, however, is not discussed further here as it is such a basic requirement that it is treated as an assumption. At Cal Maritime, the ABS School of Maritime Policy and Management houses two shoreside majors – Global Studies and Maritime Affairs (GSMA) and International Business and Logistics (IBL). In each major, the expectation of new tenure-track faculty members is to develop and incorporate maritime-specific issues, concepts, and content into courses and research wherever possible. If a desired to learn more about the maritime is not present in a prospective faculty member, a maritime academy is clearly not the appropriate institution to ply your trade. So, assuming that a new faculty member is constantly and consistently learning more about the maritime world, and in particular those issues most germane to their field of study, the next step is to incorporate this knowledge into the classroom.

The manner that this step is accomplished can and will vary across instructor. However, relying on the skill set and pedagogical tools that already exist within the new faculty member is a good place to start and can for the structural backbone of how the maritime becomes part of a course. Each instructor comes to an institution of higher education with a particular skill set that is already developed at some level. It may be in pedagogical approach and teaching style, quantitative or qualitative analysis, a deep understanding of a particular process, or anything else that a faculty member can point to as an area of teaching or research where they excel. These skills do not need any particular relevance to the maritime to be extremely important and effective in bringing the maritime into the classroom, even where it may not seem clear or obvious. For example, a faculty member may come to a maritime academy to teach in a maritime policy oriented major with a well-developed background in political institutions and policy-making but with almost no knowledge of the maritime world, significant maritime institutions, or maritime policies. The deep understanding of the institutional and policy process can become the mechanism through which the maritime is then incorporated into the course content. If an instructor comes to a maritime academy with a great skill in quantitative analysis, that skill can become a particularly effective means of bringing in the maritime. The point here is for new faculty members to use their strengths, most of which likely have no relation to the maritime early on, to overcome the challenges of teaching maritime-specific material without a maritime-oriented background.

The case-study approach can be very effective tool in the early development of curriculum in shoreside maritime policy, security, institutions, business and management, or any other topic in the broadly defined spectrum of non-engineering and non-marine science non-licensed majors. In this model, the traditional course is taught in a manner very familiar to the instructor. This can be the way they had designed and taught the course before, the way it had been taught to them previously, or simply the way they envisioned the course prior to landing at a maritime academy. In the early stages of faculty development in a shoreside major, it can be very useful to stay with what is familiar so as to not become overwhelmed with new maritime-specific material that may not come as naturally yet in a classroom environment. In staying with a familiar and more comfortable course design, the instructor can incorporate one or more maritime case studies into the course and/or lectures to add a distinctly maritime issue to the content without becoming uneasy about the ability to deliver the material as confidently as the can with their traditional knowledge bases.

Consider this example using the case study approach. The instructor enters the maritime academy with a deep knowledge of the structures and processes relevant to the understanding of international institutions. One of the courses to be taught is "International Institutions," a course often found at many universities around the world. Using the skill set already present – a deep knowledge of institutional structure and process – the instructor can design the course and include case studies on, for example, the United Nations Convention on the Safety of Life at Sea (UNCLOS), the International Maritime Organization (IMO), regional fisheries agreements, or any other international maritime institution that makes sense to include given the structure of the course. By doing so, the instructor can begin to build maritime content into courses in a manner that is potentially more comfortable and useful for both teacher and student. This way, student questions can be answered with respect to the instructor's knowledge of institutional structure and process without necessitating a specific focus on UNCLOS or the IMO. Of course, a basic

understanding of the content of UNCLOS or the Conventions of the IMO is needed, but a deep knowledge would not be at this point because the course would still remain designed around the instructor's strengths in institutional analysis. If detailed content knowledge of particular international institutions was a critical part of the course, the instructor would still use those most familiar at this point. For example, the detailed content analysis could be on the North Atlantic Treaty Organization (NATO) if the faculty member's background is in security, the United Nations Environment Programme (UNEP) for an environmental background, and so on. The main point here is that the overall course or single class session can be designed in a manner that incorporates the maritime without disrupting the instructor's level or comfort or content delivered to students.

For tenure-track faculty members, an equally challenging task may still lie ahead even after the potentially difficult task of incorporating the maritime into their individual courses has been achieved. As in the case of the ABS School of Maritime Policy and Management at Cal Maritime, there may exist a preference or requirement for tenure-track faculty members to develop entire new courses that are maritime-centric in nature. Whether using the case study method discussed above or any other pedagogical method that works well for a particular instructor, the transition from bringing the maritime into a traditional course and developing a full maritime-oriented course is another step that requires further understanding of the maritime world and pedagogical development.

Maritime-specific course development in shoreside majors

One of the final steps in the development of a tenure-track faculty member in a shoreside major is curricular development. The central component of this phase is the development of new, maritime-centric courses where in some cases there may exist any previous courses to serve as a guide. In many ways, this is the most significant challenge facing long-term faculty in shoreside majors. After coming to the academy from a traditional, non-maritime educational and teaching background, learning how to incorporate the maritime into courses and lectures in an effective ways, they now must design and implement entire courses with a maritime orientation and focus. This step, of course, takes time to reach. Generally there are several years needed to learn and become intimately familiar with the maritime issues relevant to the faculty member's area of expertise. Once a requisite level of knowledge is reached in the most critical maritime topics and issues and the general maritime world, the development of full courses can proceed and be very effective. In this section, the author gives a detailed account of two courses maritime-specific courses created while a tenure-track member of the faculty at Cal Maritime in the Global Studies and Maritime Affairs major.

Course one: International Maritime Organizations

The course titled "International Maritime Organizations" is currently a required course in the GSMA curriculum for all students in the major. It was developed by a faculty member who fits the description detailed earlier – educated and trained in traditional undergraduate and doctoral programs with little to no prior knowledge of the maritime world prior to entering the California Maritime Academy. International Maritime Organization was taught for two full years under its original title "International Organizations." The author employed the case study method as a mechanism to slowly but directly begin to incorporate the maritime-specific international institutions and organizations into the course content. During the first year, the International Maritime Organization (IMO) was implemented as a single case study in the course. The course was designed around faculty strengths in institutional structures and process and the IMO was used and discussed in the context of broader theoretical analysis of international institutions and organizations. During the second year, and after more studying and research on international maritime

institutions, the case study on the IMO was expanded and more discussion and analysis of specific Conventions of the IMO such as the International Convention of the Safety of Life at Sea (SOLAS) and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) was implemented. After the second year, it was time to develop and implement a full course on international maritime institutions and organizations for the GSMA curriculum.

The development process for International Maritime Organizations relied on two primary components: the evolution of International Organizations over the previous two years and further knowledge development in the area of non-IMO international maritime institutions. When International Maritime Organization was originally developed and implemented in contained a core component from International Organizations, specifically the general study of institutional theory, greatly expanded the focus on the IMO, and included a detailed analysis UNLCOS. Now, the new course not only covered the structure and processes of the IMO as an organization and analysis of some of the most important Conventions, but also included detailed analysis of most of IMO Conventions currently entered into force, a detailed analysis of UNCLOS, and required students to apply institutional theory directly to the IMO and UNCLOS. The current formulation of International Maritime Organizations also includes other international maritime institutions such as regional fisheries agreements as well. It is important here to note the underlying process that led to the design, implementation and evolution of this course. It began with a slow but steady increase in the depth and number of relevant maritime case studies over the first two years along with constant but yet unincorporated study of international maritime institutions. The first design of the full course expanded again on the key case study, the IMO, and added UNCLOS. In its current iteration, it has expanded once more to include regional maritime agreements. The consistent relationship between maritime-specific faculty learning, the expansion of the maritime within the traditional course, and the eventual large expansion and implementation of a new maritime-focused required course in the shoreside major was critical to its success to date.

Course two: United State Maritime Policy

The course titled "United States Maritime Policy" is currently a required course in the GSMA curriculum for all students in the major. It was developed by the same faculty member who fits the description detailed earlier – educated and trained in traditional undergraduate and doctoral programs with little to no prior knowledge of the maritime world prior to entering the California Maritime Academy. However, U.S. Maritime Policy was developed in both different and similar ways to International Maritime Organizations and is a useful alternate way to conceptualize new course implementation. Prior to being approved as a new required course, U.S. Maritime Policy was not previous taught under a different title. Rather, it was developed based on the slow but steady use of the case study method in several traditional courses that were eventually synthesized and aggregated into the new course. Maritime-specific case studies used in four separate courses with a more general focus on domestic policy in the United States were used as the central components to design U.S. Maritime Policy. In United States Foreign Policy, United States National Security Policy, American Government, and Introduction to Environmental Policy, maritime case studies were used as a means of bringing the maritime into more traditional courses. In U.S. Foreign Policy a case study on UNCLOS was used, in U.S. National Security case studies on the U.S. Navy and U.S. Coast Guard were incorporated, in American Government case studies on a few domestic maritime policies were developed, and in Introduction to Environmental Policy a case study on coastal resource management was part of the course. In each case, these case studies served to not only bring the maritime into the courses but also to assist with faculty learning and understanding of these issues with an eye toward developing an domestic maritime policy course for the major.

The development process for U.S. Maritime Policy relied on two key components as well: the incorporation and evolution of domestic maritime case studies across four courses and continuing faculty knowledge development in the area of maritime-specific domestic policies in the United States. When

U.S. Maritime Policy was originally developed and implemented it reflected an aggregation of the maritime case studies from prior domestic policy-oriented courses and included new maritime policies and institutions of the United States that had been studied and analysed over previous years but never included in a course. The current course includes but greatly expands on the maritime policy-making process and critical maritime policies to the United States such as the Jones Act that were previously taught in American Government, an international maritime policies segment that focuses on U.S. foreign maritime policy partially drawn from U.S. Foreign Policy, a security section that expands on the Navy and Coast Guard case studies from U.S. National Security Policy, and an environmental component that includes and expanded analysis of coastal resource management in the United States originally presented in Introduction to Environmental Policy. It also includes other domestic maritime issues such as state and local maritime policy, maritime energy policy, and internal waters management that emerged during faculty study of domestic maritime policy outside of the course and classroom environment.

The development of these two courses took similar yet different paths to get to the same final destination as required courses in the GSMA major at Cal Maritime. Both used the case study method of incorporating the maritime into traditional course over several years to not only bring the maritime into course in a shoreside maritime major but also to greatly enhance faculty learning in the issue areas. The final design of both courses utilized these previous case studies as central components to the new courses as well and each expanded a great deal on those case studies to offer more depth of learning and analytical opportunities for students. However, International Maritime Organization was developed from the expansion of maritime case studies within the confines of a single course with a relatively direct focus. U.S. Maritime Policy, on the other hand, was developed by bringing together case studies and maritime-oriented materials from four separate courses, meshing them together in a new framework specified around maritime policy specifically, and adding more new material than International Maritime Organizations. As shoreside course offerings and degree-granting programs continue to emerge around the world, both models may be useful to new faculty facing these challenges.

Conclusion

Faculty in non-licensed major face challenges somewhat unique to the maritime academy environment. There are very few education institutions in the world quite like the maritime academies for traditionally trained and educated faculty in non-engineering and non-marine science programs. The maritime world is rarely a focus of the undergraduate and graduate training in the fields of these faculty members. Yet, there is a need and often an expectation to incorporate the maritime into more traditional courses taught in these shoreside majors, and for tenure-track faculty, to develop new and often original courses in the maritime issues most important to the programs. The discussion above endeavours to provide a brief assessment of these challenges and offer a detailed description of the experiences of one faculty member who has attempted to overcome these challenges in a meaningful way for both the major and the students. There are certainly alternatives to the processes discussed here that could lead to resounding success in implementing the maritime into shoreside major courses, however, this paper provides a guide drawn from actual experience that may be of use to instructors who face similar challenges as shoreside programs at maritime academies continue to expand and evolve in years to come.