

Meeting the Future Need for Teaching Strategic, Shore-Based International Maritime Human Resource Management

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Abstract A globally-oriented e-textbook on strategic, shore-based maritime human resource management (HRM) is being developed in the EU-financed Northern Maritime University (NMU) project, by faculty members of the Centre of Maritime Research and Innovation of the Danish Maritime University and the Centre of Maritime Studies at Germany's Bremen University of Applied Sciences (*Hochschule Bremen* or HS). NMU is a research and common curriculum development project, having the global objective to build up a strong transnational network of universities in the North Sea Region, which intensively and continuously integrates relevant stakeholders from the maritime business sector. The e-textbook seeks to take into account the future scenario where shipping industry actors have to work to ensure global efficiency in operations, yet are also subjected to ongoing scrutiny of their practices by flag states, labour supplying states, unions, industry organisations, etc. In this scenario, shore-based HRM personnel in maritime organisations need to have an increased level of knowledge about variations between flag and labour supplying states and individual employees relating to, e.g., motivation, assessment and management of employees both on ships and shore, labour relations, the implementation of major International Labour Organisation (ILO) and International Maritime Organisation (IMO) conventions and the regulation of occupational safety and health. This paper presents the textbook's objective, content and teaching methodologies and assesses the potential contribution it can make to ensuring good global HRM practice in the maritime sector.

Keyword: *maritime human resource management, strategic management, textbooks, pedagogy, structured assignments, globalisation, Northern Maritime University*

1. Introduction

In high GNP maritime nations, an ever-increasing number of officers and ratings employed in the nationally-controlled fleet come from third countries [1]; in certain countries, e.g., Germany, persons without shipboard experience are also sometimes employed to manage ships and crews [2]. Moreover, officers from third countries remain underrepresented in senior positions on ship and in land-based work [1]. Based on these developments, a globally-oriented e-textbook on strategic, shore-based maritime human resource management is being developed in the EU-financed Northern Maritime University (NMU) project. NMU is a research and joint and common curriculum project, having the global objective to build up a strong transnational network of universities in the North Sea Region which intensively integrates relevant stakeholders from the maritime business sector. Therefore Section 2 of this paper will present the main ideas behind and features of the NMU project and elaborate on the efforts within this project to create joint and common curriculum offerings.

Section 3 of this paper presents the textbook's objective, content and teaching methodologies. The e-textbook is built up around core text, which provides a global overview. Open access websites and texts written by stakeholders and academics are used in structured assignments, to provide authentic pictures of practice from over 30 flag, port and/or labour supplying states; here, several texts are authored by IAMU member institution academics. Additionally a large number of structured assignments allow for students' independent study; they can be solved based on either the text alone or based on the text combined with other readings. These features of the textbook will be explained

further in Section 3, which will also look at features included in the textbook which are intended to make it truly adaptable to teaching students from a wide variety of countries or who will be potentially deployed in foreign countries to work with crewing or more general ship management-related HRM issues.

Finally, the concluding Section 4 provides our summary assessment of the potential need and the potential contribution of this textbook to maritime education and training (henceforth: MET).

2. The Northern Maritime University (NMU) Project

The Northern Maritime University (NMU) Project, funded by the EC Interreg IVB Programme, is an education and research initiative, which includes partners from several major Northern European universities who teach and research on maritime transport. The aim of the NMU is to develop ideas, to create a joint curriculum, and hence a virtual university, delivering courses to undergraduates, postgraduates, and industry. A further aim will be to influence policymakers.[3]

The NMU service product portfolio aims at increasing the mobility of students and lecturers and embraces the following five basic service products: 1. Exchange of Students: The NMU network enhances the possibilities for students to spend a certain period at another NMU university. Within the framework of the agreed curricula, the exchange can be organised very smoothly. 2. Joint Courses: The NMU will offer a range of joint modules. Modules and elements thereof will be delivered in various modes (campus-based, blended and e-learning, summer schools, and short courses). The teaching content developed for module elements can be easily transferred into small textbooks. 3. Virtual Competence Centre: Within the NMU a virtual competence centre will be developed that integrates and organises skills, experience and competences of members for undertaking common research projects in the maritime sector. 4. Travelling Lecturer Concept: Faculty members of the NMU partners will teach not only at their home universities but also at the campuses of other NMU partners or, for example, during NMU summer schools, at specific venues. Thus, those NMU students who are not able to study abroad can have access to an international learning experience and can gain from the diversity of the NMU staff. 5. Knowledge Sharing and Creation: Each individual NMU partner university has close relations with maritime companies and other relevant organisations. The NMU network enhances the options for the creation and sharing of knowledge by expanding the geographical coverage of individual institutions and by adding specific content. [4]

3. The E-Textbook in Strategic HRM in the Maritime Industries

3.1 The Objective of the Maritime HRM Textbook

As mentioned in the introduction, the production of the textbook must be seen in connection with the likely future scenario of hyper-competition [see 5], where the shipping industry has to work to ensure global efficiency in operations, yet is also subjected to on-going scrutiny of their practices by flag states, labour supplying states, unions, industry organisations, etc. In this scenario, the authors perceive that also shore-based HR personnel in maritime organisations need to have an increased level of knowledge about variations between flag and labour supplying states and individual employees relating to, e.g., motivation, assessment and management of employees, labour relations, the implementation of major ILO and IMO conventions and regulation of occupational safety and health. Moreover, the HR personnel will to an increasing extent have to compare the strengths, weaknesses and future potentials of national MET systems for crewing supply country choices and possibly also assess whether a company should provide monies for MET and, if so, which MET institution(s) and underlying labour market(s) match the company's needs.

To date, although a few public universities and private sector maritime education providers such as Lloyd's have provided courses on, e.g., "Crewing and manning", many shipping, ship management and crew management companies appear to have in practice mainly used the "learning by experience"

approach in their shore-based units that deal with maritime human resources, and there has also been a lack of strategic focus on HRM in many of these companies, especially among the small and medium-sized actors [6,7]. Here, it is also worth noting from a regional competitive perspective concerning the North Sea Region that the European actors are not necessarily generally at the forefront of development of strategic practices [see 8]. Thus, the textbook aims to both meet the needs of local North Sea Region industry stakeholders and also of industry stakeholders in other regions.

Both the strategic management of human resources on board ships, in port areas and in shore-based maritime industry companies are covered by the e-textbook. This has been chosen because studies of the career paths of maritime personnel [9, 10] show that ship officers often move to shore-based positions in the maritime transportation firms or in ports. At Hochschule Bremen (HS), potential target groups for a final year elective module using the textbook were specified as students of Bachelor-level "Nautical Studies" (in German: "*Diplom-Wirtschaftsingenieur für Seeverkehr (NAUTIK)*", see: <http://www.hs-bremen.de/internet/de/studium/stg/>) and "International Shipping and Chartering" (in German: "*Internationaler Studiengang Shipping and Chartering B.A.*", see *ibid.*). study programmes. In Denmark, the plan has been to approach Danish (including Greenland), Faroese and Icelandic maritime interest organisations, and maritime schools and other educational units to find potential students. Among this population, there are a number of past graduates of navigation and marine engineering study programs who have only received a vocational degree – and thus not the current "Professional Bachelor" level of training that Danish-educated navigation, marine engineering and dual purpose officers now commonly receive. Based on previous research [11], it is known that some of these past graduates from Danish MET institutions work with shore-based HRM. Moreover, as they have vocational degrees, the text level of a third or final year Bachelor level textbook would also be suited for these students, and some current students in both the coming shore-based maritime business administration program and in the current Danish officer training study programs interested in such an elective might also take the course.

Here, it is to be stressed that for current navigation and marine engineering officer students, this course and the e-textbook are not viewed as a replacement of existing courses in, e.g., human element issues, which are commonly designed to fulfil the STCW Convention and ISM Code requirements. Instead this course is planned as a supplementary elective. Here, it is also strongly advised that students in shore-based maritime business administration programs who would like to work with crewing and ship management afterwards also take the obligatory courses for ship officers that have been designed to fulfil these IMO international agreements, in addition to taking this elective. The relation between covered themes of such obligatory courses and this elective is depicted in Figure 1, which also shows that the obligatory courses have to account for specific flag and/or labour supplying state interpretations of the underlying IMO agreements, whereas this strategic course provides the global overview.

<p>About the courses required by STCW & ISM</p>	<p>This course focuses on strategic HRM</p>
<ul style="list-style-type: none"> • These are subject to flag and/or labour supplying state scrutiny and thus much more difficult to standardize internationally. • They focus less on strategic management issues 	<ol style="list-style-type: none"> 1. Introduction to HRM on shore, including especially in ports and transportation firms 2. HRM intro to ship-board management 3. Labour economics and industrial relations 4. Safety, occupational health and other regulations in ports and regarding ships 5. Personnel selection, retention, career planning, education & investment in education

Fig. 1 Comparison of the obligatory STCW/ISM courses in MET and this course

3.2 The content of the e-learning textbook

First, the e-textbook is built up around a core text, which provides a global overview. The covered themes of the e-textbook are depicted in Table 1.

1. Shore-based HRM (1.5 ECTS, 0.5 ECTS based on external content)
A. Role of HRM – ideal and true roles, operational tasks, possible strategy implementation
B. Organisational structure and culture
C. Variation according to maritime firm type, with focus on ports and port firms
D. Variation of HR practices across regions and firms
E. International HR and HR coordination
F. Ethical issues and corporate social responsibility
2. HRM on board ships, including occupational safety, psychological and health issues (1.5 ECTS, 1.0 ECTS based on external content)
3. Wage and benefit creation, role of unions and employers organisations (1.5 ECTS, 1.0 ECTS based on external content)
A. Neo-classical wage equilibrium models
B. Wages and benefits as motivation factors
C. Performance-based pay
D. Unions in general, in maritime transport, national variations and ITF
E. Employers organisations in maritime transport, national variations and global organisations
F. Collective bargaining at national level and in the international bargaining forum
4. Labour conditions regulation on land and on board ship (1.5 ECTS, 1.0 ECTS based on external content)
A. ILO, EU and national regulation of labour conditions on land, including the roles of occupational health and safety authorities and other authorities and institutions
B. ILO's 2006 Maritime Labour Convention
C. Other relevant IMO and ILO Conventions concerning shipboard work
5. Personnel selection, retention and career planning, planning and investment in education and training (1.5 ECTS, 0.5 ECTS based on external content)
A. Variations in selection processes and legislation for shore and ship-based positions
B. Assessing personal and professional qualifications, including psychological, cognitive and skills tests
C. Employee retention and career planning plans
D. Planning education and training
E. Investing in education and training at home and abroad, with focus on MET in economies of transition and developing countries

Table 1. Overview of the content of the e-textbook

The text includes the basic fundamental information about the issues at hand. However, as this is an e-textbook, at times the core text also requires the students to read documents such as legal texts, academic articles or reports written by other maritime or port industry business leaders, academics or other experts. In this way, the e-textbook becomes the “nexus of linking of information” but much space is allowed for other industry and academic experts.

Open access websites and texts written by stakeholders and academics are used in structured assignments. This is illustrated by Table 2, on the next page, which depicts the geographical distribution of the included cases in the above module elements 1 and 3.

The structured assignments allow for students' independent study; they can be solved based on either the text alone or based on the text combined with other readings. Moreover, some structured assignments are also adaptable to national circumstances; the student can choose the country(-ies) to focus on and to also use other languages than English in solving the assignments, if local instructors allow for this. Finally, the e-textbook is suited for so-called e-based learning, with only internet-based

1. Shore-based HRM	Cases based on texts from/about:
A. Role of HRM – ideal and true roles, operational tasks, possible strategy implementation	UK and country of own choice
B. Organisational structure and culture	Croatia, Italy, Turkey, World Bank Port Reform Toolkit
C. Variation according to maritime firm	Nigeria, Spain
D. Variation of HR practices across regions	Australia, Latin America, Turkey, country of own choice
E. International HR and HR coordination	Germany, Australia,
F. Ethical and CSR issues	Greece, Norway
3. Wage and benefit creation, role of unions and employers organisations	
A. Socio-economics of maritime labour markets	Germany, Global (concerning female seafarers), Italy, Hong Kong, Latvia, Netherlands, Spain, South Africa, Sweden, World Bank Port Reform Toolkit
B. Wages and benefits as motivation factors and performance-based pay	Germany, Kiribati, Shiptalk Life at Sea Survey, South Africa
D. Unions in general and in maritime transport	Brazil, China, Denmark, Germany, Japan, Korea, Malaysia, Philippines, Russia, Singapore, Viet Nam, USA
E. Employers organisations in maritime transport and ports industries	Canada, Phillipines
F. ITF efforts, International bargaining forum and the future	ISF's Guidelines on Good Employment Practice, ITF & Chinese seafarers, Netherlands & UK (Nautilus)

Table 2. The geographical and thematic coverage of the structured assignments

interaction among the course instructor and students, and “blended-learning”, with face-to-face interaction as well as e-learning.

3.3 The underlying pedagogical principles of the e-learning textbook

The e-textbook is made based on the first principle that the student is an independent learner, who bears the fundamental responsibility for his or her own level of learning. Thus, it is made such that it can be used in a situation in which the only interaction with the course instructor is internet-based and, in this case, will mainly centre on the structured assignments and any other questions to the material that the student has. However, the e-textbook is also suited to a classroom situation as well, yet in contrast to many English-language business administration textbooks, a standard package of overheads is not provided with the textbook. The reason for this is that it is the authors’ experience that if classroom interaction is conducted in a native language of the country in question, while using an English-language textbook, as is commonplace in, e.g., the Nordic countries and the Netherlands as well as parts of, e.g., China, India and the Philippines, the instructors in many cases prefer to make their own overheads in the language of oral classroom communication.

Secondly, the course aims to provide a global overview of key themes, such as to provide an introduction to the main issues and also, through the links to the external texts, and also the provision to the students of the now around 120 page international maritime HRM literature list of the author of most of the module elements (i.e., the first author of this paper) to encourage independent study by the students on issues that either interest them or that they know will be needed in their future career (or both). For mature students already in their maritime career, it is the first author’s experience that such students when taking such a course often have a list of issues that they wish to learn more about during the course. Thus, in planning the course in this way, one allows for students’ independent study.

However, for the less mature younger full-time Bachelor students, it is probably equally important to remind some of them that they are not (yet) experts after just one overview course. Therefore at the

conclusion of each chapter, there are summarising statements such as the following from the Module Element 5 [12]:

“Through the completion of this Module Element, you have learned about personnel selection, retention and career planning in the maritime transport and ports sectors. Beyond this, you have learned about planning and investment in education and training. Section 1 dealt with variations in selection processes and legislation for shore and ship-based positions, whereas the theme of section 2 was assessing personal and professional qualifications, including psychological, cognitive and skills tests. In section 3, employee retention and career planning plans were discussed for the case of port workers, seafarers and shore-based employees, whereas section 4 dealt with planning education and training. Finally, for the specific case of seafarers, investing in maritime education and training for seafarers at home and abroad was the focus on Section 5, and here focus was especially placed on MET in economies of transition and developing countries.

The organisation, economic and sociological considerations about personnel selection, retention, career planning and investment in education and training were supplemented by structured assignments which took their points of departure in local circumstances in many different countries around the world as well as global labour market and educational market issues. Each assignment was connected to external textual readings, most of which were written by stakeholders or academics who presented the viewpoints of stakeholders in real-life situations. Thus, based on the completion of this module element, you should have a solid overall understanding of these issues. However, in specific job-related situations, it may be necessary to work with navigation and marine engineering experts to assess the quality of seafarers or maritime education and training from specific countries. Similarly, you may need to consult lawyers, economists and accounting experts concerning firm-specific policies and cost and efficiency calculations with regard to policies and investments and policies in personnel selection, retention, career planning and education.”

In university education in many countries, both critical thinking skills and a basic introduction to methodological (here understood as both quantitative and qualitative methods as well as the scrutiny of fundamental theoretical assumptions for their logic and applicability to a specific part of reality) and validity issues occurs already at the Bachelor level of studies, as this is perceived as necessary to ensure the quality of paper writing assignments to be submitted by the student. This is also the case in the Northern Maritime University countries. Thus, the analysis required in the majority of the structured assignments also presupposes these skills. Below, three sample structured assignments are provided from [12].

3.4 Structured Assignment 1.5 Organisation of shore-based ship management tasks

“For this assignment, first read Celik, M. and Er, I.D., 2008. Exploring the Key Aspects of Management Organizations in Shipping Business. *Lex et Scientia*, No. XV (Bucharest, Romania). Available at: <http://lexetscientia.univnt.ro/ufiles/11.%20Turcia.pdf>. Then answer these questions:

1. Please list the six key aspects in the five mentioned areas of management (executive management, personnel management, operational management, technical management, and safety management) which were perceived as being most significant issues in this research. Then list the six key aspects that were perceived as being the least significant.
2. Table 1-5 on pages 4-5 lists all key aspects for the five areas of management, in the viewpoint of Celik & Er (2008). Please rearrange all key aspects so that you place them where you believe they would be placed, in relation to the following five organisational structure parts of Mintzberg (1983) [13]:

- The operating core
- The strategic apex
- The middle line
- The technostructure
- The Support staff'

3.5 Structured Assignment 3.21 The Employers' Association at Canada's Port of Halifax

"For this assignment, you must first access and read the following six web pages at the Halifax Employers Association: 1. Welcome page, with a message from the President, at: <http://www.halifaxemployers.com/>, 2. About us/History of the Association, at: <http://www.halifaxemployers.com/history.asp>, 3. About us/Organizational chart, at: <http://www.halifaxemployers.com/officers.asp>, 4. About us/Bylaws – Articles of Associations, at: <http://www.halifaxemployers.com/bylaws.asp>, 5. Employee relations/Policies – Procedures, at: <http://www.halifaxemployers.com/policies.asp>, and 6. Employee relations/Employee Assistance Program, at: <http://www.halifaxemployers.com/eap.asp>. You are of course also free to examine any other web pages on the website, if you would like to do so.

1. Based on the above information as well as the text of this module element up to this point, including the previous structured assignments, discuss the potential benefits of membership in the Halifax Employers Association for a stevedoring company present in the Port of Halifax. Here, you may write up to 600 words in your answer. Beyond the 600 word limit, you should also provide supplementary references with full bibliographical data to relevant works you have read and also used in answering this question, if you choose to take these works into consideration in answering the question.
2. Based on the above information as well as the text of this module element up to this point, including the previous structured assignments, discuss the costs and opportunity costs of membership in the Halifax Employers Association for a stevedoring company present in the Port of Halifax. Here, you may write up to 600 words in your answer. Beyond the 600 word limit, you should also provide supplementary references with full bibliographical data to relevant works you have read and also used in answering this question, if you choose to take these works into consideration in answering the question.

3.6 Structured Assignment 5.16 Technology and Organisational Culture Variables in relation to Knowledge Management in Shipping Firms

"For this assignment, you must first read Fei J, Chen S, and Chen S. L., 2009. Organisational Knowledge Base and Knowledge Transfer in the Shipping Industry. *Electronic Journal of Knowledge Management*, 7(3), pp. 325 – 340. Available at: <http://www.ejkm.com/volume-7/v7-3/v7-i3-art3.htm>.

1. Choose a major shipping actor, e.g. a shipping firm, ship management firm or crewing firm, from your home country or a neighbouring country, about which you have some knowledge and which has an internet site. Here, you must write the name of the firm and then state the internet site.
2. Discuss, based on Figure 3 and the discussion of Figure 3 (pp. 330-1) in this article, which specific factors and institutions you believe especially influence the organisational knowledge based of the chosen firm. Here, you may write up to 600 words in your assessment. You may also refer to external sources, if you choose to include these in your answer. If you do so, list the full references; these will not count toward the 600 word total.
3. In relation to Figure 5 of this same article (see p. 335), discuss (a) which knowledge transfer mechanisms are technically feasible in relation to the ships on which crews related to your firm work and (b) which knowledge transfer mechanisms you would deem especially suitable based on your knowledge of the chosen firm's organisational culture and the common employee preferences and expectations in the home country of the firm. In answering this question, you may

write up to 750 words. Here, you may similarly refer to external sources, if you choose, provided that you list the full references to these sources. These references will not count toward the 750 word limit.”

4. Conclusions

Based on the ever-increasing level of competition in the shipping business and the increasing demands put on crews and port employees and the efficiency of crew and port employee management practices, we believe that there is a need for a textbook in strategic maritime HRM. We are seeking to address this need in the Northern Maritime University project through a globally oriented e-textbook, which will also be useable in other world regions as well. The e-textbook is built up in a flexible manner, with links to important legal texts, articles and reports written by industry stakeholders and with structured assignments that can be adapted. In this way, the e-textbook also has the potential to become a dynamic “nexus of information” that also can be used to teach students to gather needed HRM information and assess and update it independently.

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References

- [1] BIMCO/ISF, *BIMCO/ISF Manpower 2005 Update. The Worldwide Demand for and Supply of Seafarers*. BIMCO/ISF/Warwick Institute for Employment Research. 2005.
- [2] Klikauer, T. and Morris, R., “Human resources in the German maritime industries: 'back-sourcing' and ship management”, *The International Journal of Human Resource Management*, Vol. 14, No. 4 (2003), pp. 544 — 558.
- [3] Baird, A, Conference Synthesis of the *NMU-IMEC Maritime Education & Training Conference*, Orkney Isles, 29-31 May 2008, http://nsr.nm-uni.eu/download/doc_download/30-synthesis-maritime-education-conference-baird [accessed 15 June 2010]
- [4] Pawlik, T., Northern Maritime University (NMU), Concept for a Service Product Portfolio, Kiel , 2009 (unpublished).
- [5] Reich, R.B, *Supercapitalism: The Transformation of Business, Democracy, and Everyday Life*. Vintage Books, 2008.
- [6] Bordal, J., Haeselich, H., Kohli, G.P. & Meling, J., *Future competence of seafarers*, Report of a project in the research programme SIKT (Ship Management and Information Technology) on behalf of the Norwegian Shipowners’ Association and the Research Council of Norway, 2002. Downloadable from: http://www.rederi.no/default.asp?V_ITEM%20ID=956&AID=1761&TEMPORARY_TEMPLATE=96 [accessed 29 June 2010].
- [7] Progoulaki, M. & Theotokas, I., “Human resource management and competitive advantage: an application of resource-based view in the shipping industry”, *Marine Policy*, Vol. 34, No. 3 (2010), pp. 575-582.

- [8] Kundu, S.C., Malhan, D. & Kumar, P. "Human Resource Management Practices in Shipping Companies", *Delhi Business Review*, Vol. 8, No. 1 (2007), pp. 75-88. Downloadable from: <http://www.delhibusinessreview.com/v8n1/7.pdf> [accessed 29 June 2010].
- [9] Southampton Solent University, *The Mapping of Career Paths in the Maritime Industries*, Southampton Solent University for the European Community Shipowners' Associations (ECSA) and the European Transport Workers Federation (ETF) with the support of the EU Commission (2001). Downloadable from: <http://www.ecsa.be/publications/054.pdf> [accessed 29 June 2010]
- [10] World Maritime University, *Study on European Maritime Graduate and Post-Graduate Programmes for Former Seafarers*, Malmö, Sweden: World Maritime University, Maritime Transport Coordination Platform Report of the EU's Sixth Framework Programme, 2005. Available at: http://www.maritime-transport.net/mtso/downloads/Public_Information/MTCP_report_Graduate_and_master_programmes_for_seafarers_study.pdf [accessed 29 June 2010].
- [11] Søfartsstyrelsen/Danish Maritime Authority, *Forløbsanalyse for danske søfarende – rekruttering, uddannelse og beskæftigelse*, Copenhagen, Denmark: Danish Maritime Authority, 2003. Available at: <http://www.sofartsstyrelsen.dk/SiteCollectionDocuments/Publikationer/Skibsfartspolitik%20og%20erhvervs%20vilk%C3%A5r/Forloebanalyse.pdf> [accessed 29 June 2010].
- [12] Wagtmann, M.A., Module Element 1, 3 & 5 of the planned NMU textbook in *International Strategic Maritime Human Resource Management*, University of Southern Denmark/NMU Project.
- [13] Mintzberg, H., *Structure in Fives: Designing Effective Organizations*, Englewood Cliffs NJ USA: Prentice Hall (1983).