

Practical solutions for a veritable maritime online library

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ABSTRACT

One of the actual objectives of IAMU/WG III is to find the general framework for a Virtual Global Maritime University.

In order to design a good course, the basic starting point is the bibliography that you could use for drawing up the course. In my opinion, from all scientific domains that are subjects of high degree studies, the maritime field is the most "water-tight", regarding the free access to information.

In the last seven years I have spent hundreds of hours surfing the Net in order to find useful documents for updating my courses, or in order to see how other maritime universities teach the same things. I was very disappointed that after all these hours I have found myself almost empty handed.

For example, the only free navigational monograph available on the Internet is "Bowditch - American Practical Navigator". Indisputably, the USA is the world's no.1 country regarding free information access over the NET, and the web sites of USCG, NIMA or NOAA could be mentioned as very good examples for a "XXI Century freedom of information" model.

A Virtual Maritime University will be great, but in order to achieve this aim a lot of resources (human, financial, time) are required. Speaking only of the financial aspects, such a job will cost tens of thousands of dollars.

The goal of my paper is to propose a far more inexpensive and quick solution that will provide online useful resources for maritime students and teachers. I want to suggest some practical means for **creating a real online library, with real free downloads, without copyright problems and constantly updated**. On the other hand, this could be the first step for the future IAMU Virtual Maritime University.

1. Introduction

One of the final documents edited at the end of the 2nd General Assembly of IAMU held in Kobe, was "The Action Plan of IAMU for 2001-2002". One of the main activities for the WG 3, as stipulated in this action plan, refers to the "Development of a framework for a Virtual Global Maritime University".

During the plenary workshop - session VII, of the 2nd General Assembly of IAMU, Mr. Barrie Lewarn from the Australian Maritime College, presented a paper called "Maritime Education and Training - the Future is Now". This paper underlined the challenges that must be faced by maritime education, in order to respond to the actual practical needs of the maritime field and to the actual evolution trend regarding teaching and dissemination methods.

I was very interested by the conclusions of this presentation and I saw that the same paper also impressed the editorial board of IAMU Journal, because they reprinted it in IAMU Journal vol.2, no. 1 in March 2002.

In his paper, Mr. Barrie Lewarn concluded that "A truly global maritime university could be developed: not at WMU, but an organization set up and run in a business like manner, taking the best courses and skills from the partner institutions, and using flexible learning techniques to the maximum: a virtual maritime university."

Starting from this, between March and July 2002, I have made an Internet investigation, in order to find what is the actual state of facts regarding virtual maritime universities initiatives in the world and how the IAMU member universities are prepared to fulfill such a task.

At the same time, I have to say from the beginning that I am not of the same opinion as Mr. Lewarn regarding the concept of virtual universities, mainly because I do not agree with the idea of distance learning in maritime education. Furthermore, I am against any intentions of IAMU to sell knowledge and information. Of course, building a real virtual university is a very costly task and could not be probably undertaken by any of the IAMU

members alone, without external financial support. In my opinion, these efforts must be ruled by the idea of cooperation between the maritime universities in order to offer free knowledge access, and not of doing business and making a profit.

Because money is always a problem, the main aim of my paper is to present the cheapest way for our universities to promote their experience, skills and knowledge, mainly to the worldwide students interested in learning new things.

2. State of facts regarding Virtual Maritime Universities

In many academic fields, the universities are already adopting the new electronic technologies and implementing new learning techniques based on computers and multimedia facilities. As a result, there are already a great number of virtual universities that promote distance learning and online courses. The leading role in this process belongs to the economic, business and management higher education sectors. Undoubtedly, this process was facilitated by the specific of the disciplines and courses that are held in these universities, much more suitable to be delivered without the physical presence of the students.

In the maritime education field, such initiatives are far beyond and there are not many signs that things will change considerable in the near future. Many computer fans will say that the maritime sector is too conservative and reluctant to the new technologies. Such criticism is only partially true and I agree with it only if we are talking about direct learning techniques.

During my Internet investigation I've found **only two** Virtual (more or less) Maritime Universities (VMU) and these WEB sites prove that, technically speaking, it is possible to adopt such dissemination methods, even for maritime studies. These already running VMU are:

- q ASBA Maritime Learning Online (<http://www.asba.org/Learning/start.html>)

This WEB site was created by the Association of Ship Brokers & Agents USA (ASBA), a non-

ASBA
mlo
Maritime Learning Online

Introduction

Our Online Courses Our Professors Who Should Apply Frequent Questions Register Me! Student Login Contact ASBA

Welcome

To The Future of Educational Offerings at ASBA

"Let knowledge provide a competitive edge in a tough market"

- ▶ Introducing distance learning via the World Wide Web, comprehensive continuing education for the Maritime Industry through ASBA's "Maritime Learning Online". Have a look at our initial course offerings, FAQ's and other information. If you have further questions, please feel free to contact us directly
- ▶ Shipbroking and Chartered Vessel Operations - Two Times per Year
- ▶ Maritime Law - Two Times per Year
- ▶ Year 2001 in Review - Major Charter Party Arbitration - Details to be Announced

governmental association that had realized that such an initiative could bring advantages for the maritime industry. The course modules offered for online learning are orientated towards maritime management and maritime law and their target audience is primarily post graduate people, which are already working in shipping:

- College Students
- Ship Brokers, Charterers and Agents
- Lawyers for continuing education or interest in a Maritime focus
- All others considering employment in the Maritime field
- Chartering Managers and Operations Executives

Upon registration, each student will be provided with his/her password for purposes of logging on to the ASBA continuing education web page.

Each student will select his/her time for attending the "virtual" class every two weeks (by reading classroom lectures). Each student must also read the textbook and other more traditional reading materials. Students will be required to ask questions of the course instructor via the ASBA web based bulletin board. At the end of the course, ASBA will award a certificate upon satisfactory completion of the program.

ASBA offers two types of courses:

- BASIC PRINCIPLES OF MARITIME LAW - 12 weeks duration

Main course topics:

- The Sources of Maritime Law,
- Maritime Arbitration.
- Fundamentals of Freight,
- Bills of Lading: Applicable Laws, Function and Use,
- International Conventions Relating to Carriage of Goods by Sea.
- Delivery of Cargo,
- The Duty of the Carrier to Make the Vessel Seaworthy,
- Faults of the Shipper,
- Charter Party Forms and Functions,
- Loading and Discharge, Laytime, etc.,
- Elements of Salvage,

The second course provided by ASBA is:

- SHIPBROKING AND CHARTERED VESSEL OPERATIONS - 12 weeks duration

This course primarily concerns the carriage of goods under charter parties and it was designed to provide comprehensive information for those involved in shipbroking, vessel operations, ship management, agency, export/import trading, marine insurance.

Main course topics:

- Basic Responsibilities Under Charter Parties
- ASBATIME cont. - The Role of Shipbrokers
- The NYPE Form - Agency/Ship Agents
- Commodities and Cargo Considerations
- Charter Party Forms and Clauses
- Laytime & Demurrage/Despatch
- Tanker Chartering
- Marine Arbitration & Admiralty Law

I have reproduced parts of these courses syllabus in order to underline the topics that are already delivered by means of distance learning. As we can see from ASBA experience, we have here a law course and an ship economics course. Most of these course topics have no relevance for STCW 95.


q The second Virtual Maritime University that I will bring into focus is **MILES** (Marine Institute Learning Electronic Services), part of "Memorial University of Newfoundland", Canada. (<http://www.mi.mun.ca/miles/>).

They develop distance education products with a complement of skills that includes: project leadership, instructional design, content development, media production, and learning technology programming and support. Depending on the course, delivery may be conducted through the Internet, CD ROM and interactive conferencing with learning technology software.° The learning technology consists of a suite of tools that provides inter-active exercises, such as group discussions, presentations, and information sharing.

General directions and instructions for the CD ROM and how to access the WWW are mailed prior to the start date of the course. Once registered for the course, students will receive a username and password. Courses may use texts, required and recommended readings, CD ROM and on-line learning technology to facilitate learning.

The Marine Institute through the Division of Instructional Development and Student Services, has developed training and education products in multimedia format in the following curriculum areas:

- Transport Canada - for deck or engineering officers
- Bachelor of Technology - specialization in Ocean Engineering
- Bachelor of Maritime Studies - specialization in Maritime Business

		Fisheries and Marine Institute of Memorial University	
Overview	<p>The Marine Institute is a learner focused institution, committed to meeting the needs of students here at home, nationally and internationally by providing education and training that is flexible and which meets the demands of their lifestyles. The Marine Institute through the Division of Instructional Development and Student Services, has developed training and education products in multimedia format and is continuing to develop products for MILES in many curriculum areas.</p>		
<i>Design Development Delivery Facilitators</i>			
Technical Requirements			
MILES Learning Guide	<p>Courses are available for the following programmes:</p>		
Programs	<p><u>Transport Canada</u> <u>Bachelor of Technology</u> <u>Bachelor of Maritime Studies</u></p>		
Libraries			
Log On to WebCT	<p>Bookmark this site to keep an eye on progress as we increase our offerings. Courses of interest to you may be available soon!</p>		

The emphasis of the "Transport Canada" courses is on training personnel who have the necessary sea-going or workshop experience to challenge each level of certification. For example, for already certified deck officers, MILES provides through "Transport Canada" curriculum courses for a Master Mariner degree. For this specialization, the online courses delivered are: Navigation Instruments, Ship Management, and Meteorology. This means that only 30% of the curricula for Master Mariner is delivered online. Instead, for the Bachelor of Maritime Studies (Maritime Business) curricula, 75% of the courses are prepared to be accessed online.

This difference between the two curricula regarding the number of online courses, proves once again that for the training of navigational personnel the distance learning is not yet considered the best solution. Practically, MILES offers only a Master Mariner degree, and the enrollment for these courses is permitted only for certified officers.

Surfing the NET, I have discovered another WEB site that pretends to be a portal for virtual maritime training.

This site is "Maritime E-campus" (<http://www.maritime-ecampus.com/>), administrated by KMSS (Kongsberg Maritime Ship Systems). Here we can not speak of a real virtual university, this site being only a portal that has links

to some maritime schools: Kalmar Maritime Academy, Svenborg International Maritime Academy, Alesund Maritime. The INTERNET facilities are used only to book online the courses offered in a traditional manner by these Institutions. The aim of KMSS is to promote through his site the Norwegian maritime schools.

As we can see, for the moment there is not anywhere in the world a Virtual Maritime University able to deliver training for maritime officers, in accordance with STCW 95 curriculum.

Speaking again of STCW, I have to declare that I do not agree at all with Mr. Lewarn when he says, "*as professional educators we should be ashamed that it has taken an international convention (STCW 95) to drag maritime education and training into the world of modern education practice*". I am convinced that for the great part of our universities, the STCW 95 Convention is only a checklist, useful for checking if our own maritime curriculum fulfills all the topics required by STCW. In my opinion, it is the IMO Model courses 7.01-7.04, that seem to be more useful, even if these courses are not yet fully updated to all STCW 95 requirements. We can find here a guide for the minimum number of teaching and practical hours for the disciplines that could contain all the STCW subjects.

For us, these IMO courses are the strongest argument when we have to persuade our Ministry of Education, that the maritime education program needs more teaching hours than a regular engineering curricula.

On the other hand, the STCW have nothing to do with "modern education practice". Undoubtedly, we can speak about the STCW 95 provisions regarding the use of simulators (radar and engine) as a modern technique for practical training and assessment of seafarers. But, on the other hand, we have to admit that this Convention failed to certify that the hours of training on (an approved type) simulator could be the equivalent of at least 4 times the same period of seagoing practice, in respect of navigational watch duties. With or without STCW specifications, we had already updated our courses in respect of the new technology applied, for example, in navigation. Consequently, we present DECCA, LORAN-A or OMEGA only as elements in the historical evolution of electronic position fixing systems, teaching the students only about the use of LORAN-C. Also, we explain the advantages of GPS satellite system on the old TRANSIT system, and we are training our students for the use of ECDIS and integrated bridge operation.

3. Online libraries

After finishing my search of the NET for Virtual Maritime Universities, I have started to review the IAMU members WEB sites, in order to see how each university provides online access to information for their own students and staff.

The result of this investigation was not very encouraging for me, as to one of the IAMU main goals: "**the passing of the world's existing skill and knowledge**" - see *IAMU News (No.1 March 2000)*. "Passing" knowledge, in IAMU policy means not only to provide this new information to our own students, but also to undertake all efforts to spread this knowledge to all the interested people in the maritime sector.

My findings will be synthesized in the following table and the "Comments" column legend is:

- A = WEB pages in English (Yes/No)
- B = Electronic Library (Yes/No)
- C = Online documents (Yes/No/Password required)
- D = Free documents (Yes/No)
- E = Free teaching materials
- F = Links to other INTERNET sources of information (Yes/No)

- "documents" = books, e-journals, abstracts, papers, presentations, etc.
- "online documents" = documents that could be read online or downloaded
- "teaching materials" = courses, presentations, tests, examination papers, etc.

Abbreviations used in table:

- Y = Yes
- N = No
- Ps = password required

Table 1 - Online library facilities on IAMU members WEB sites.


IAMU Member	Country	Home page address	Comments					
			A	B	C	D	E	F
ITUMF - Istanbul Technical University, Maritime Faculty	TURKEY	http://www.tdf.itu.edu.tr/	Y	Y	N	N	N	N
KUMM - Kobe University of Mercantile Marine	JAPAN	http://www.kshosen.ac.jp/english/	Y	Y	N	N	N	N
AASTMT - Arab Academy for Science, Technology and Maritime Transport	EGYPT	http://www.aast.edu/	Y	N	N	N	N	N
AMC - Australian Maritime College	AUSTRALIA	http://www.amc.edu.au/	Y	Y	Ps	N	N	Y
Southampton Institute Maritime Faculty	UK	http://www.solent.ac.uk/	Y	Y	Ps	N	P	Y
MMA - Maine Maritime Academy	USA	http://www.mainemaritime.edu/	Y	Y	Ps	N	N	Y
WMU - World Maritime University	SWEDEN	http://www.wmu.se/	Y	Y	Ps	N	N	Y
Admiral Makarov State Maritime Academy	RUSSIA	http://www.gma.sp.ru/	Y	N	N	N	N	N
Constanta Maritime University	ROMANIA	http://www.imc.ro/	Y	Y	Y	N	Y	N
Dalian Maritime University	PEOPLE'S REPUBLIC OF CHINA	http://www.dlmu.edu.cn/	N	N	N	N	N	N
Faculty of Nautical Studies, Polytechnic Univ. Of Catalonia	SPAIN	http://www.upc.es/fnb	Y	Y	Y	Y	N	Y
Gdynia Maritime Academy	POLAND	http://www.wsm.gdynia.pl/	Y	Y	not responding			
Korea Maritime University	KOREA	http://www.kmaritime.ac.kr/	Y	Y	not found			
Liverpool John Moores University	UK	http://www.livjm.ac.uk/	Y	Y	Ps	N	N	Y
Massachusetts Maritime Academy	USA	http://www.mma.mass.edu/	Y	Y	not responding			
Mokpo National Maritime University	KOREA	http://www.mmu.ac.kr/	Y	N	N	N	N	N
Nicola Y. Vapsov Navak Academy	BULGARIA	http://www.naval-acad.bg/	Y	N	N	N	N	N
Odessa State Maritime Academy	UKRAINE	http://ma.odessa.ua/	Y	under construction				
Rijeka College of Maritime Studies	CROATIA	http://www.pfri.hr/	Y	Y	N	N	N	N
Dokuz Eylul University School of Maritime Business and Management	TURKEY	http://www.deu.edu.tr/smbm/IN_GILIZCE.htm	N	N	N	N	N	N
Shanghai Maritime University	PEOPLE'S REPUBLIC OF CHINA	http://www.shmtu.edu.cn/	Y	N	N	N	N	N
Szczecin Maritime University	POLAND	http://www.wsm.szczecin.pl/	Y	Y	not responding			
Tokyo University of Merchant Marine	JAPAN	http://www.ipc.tosho-u.ac.jp/	Y	N	N	N	N	Y
University of Cantabria/Santander	SPAIN	http://centros.unican.es/marinacivil	Y	N	N	N	N	N
U.S. Merchant Marine Academy	USA	http://www.usmma.edu/	Y	Y	N	N	N	Y
The California Maritime Academy	USA	http://www.csum.edu/	Y	Y	Y	Y	N	Y
E.N.M.M. Ecole Nationale de la Maritime Marchande de Marseilles	FRANCE	http://hydro.marseille.free.fr/	N	Y	Y	Y	Y	Y

Note: Last INTERNET survey was undertaken on 15th of July 2002.

Out of 27 maritime universities (all IAMU members), 67% have an electronic library WEB page. Some of these universities possess huge collections of books, periodicals, articles and papers, related to the maritime sector. But, as we can see from columns D and E, only 11% have on their sites free documents and only 7% of them have free teaching materials on their web PAGES.

What is the purpose for allowing acces to your own information resourses only for your own students and staff? One explanation could be that you want to win a possible competition with other similar universities and you think that restricting others access to knowledge, your students will be the best.

In a competitive world like ours, this could be a good reason. Why then so much fuss and annual IAMU conferences where we are talking about curriculum harmonization and methods to train better seafarers?



Les cours à télédécharger

Les auteurs dégagent toute responsabilité consécutive à l'utilisation incorrecte des informations et schémas des cours proposés ci-dessous, et ne sauraient être tenus responsables ni d'éventuelles erreurs ou omissions, ni des conséquences liées à la mise en oeuvre des informations et schémas contenus dans ces cours. La responsabilité de l'ENMM autorisant la publication de ces différents cours sur son site ne saurait pas davantage être engagée.

navigation
exploitation du navire
électricité/électrotechnique
électronique
automatique
mémoires des élèves de 5 ^e année

thermodynamique

cours sur le conditionnement d'air ZIP 111 ko

pédagogie

Petit manuel pour parler en public, être écouté, convaincre ZIP 344 ko
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École Nationale de la Marine Marchande de Marseille

Conclusions & Final Proposals

We think that for the moment we cannot afford to consider maritime students simple "customers". We have to bear in mind that 80% of the maritime accidents are produced by human error. A Virtual Maritime University built from the beginning with the purpose to deliver long distance nautical courses only for gaining us much money as possible, could be a great mistake.

Sometimes I compare our graduates with the graduates from medical universities, because all of them, soon after their graduation have to deal with real situations, with great responsibilities, and with a very narrow margin of error.

I am not aware that we have at this moment any medical school that graduates distance learning students. As patient, would you let on the hands of a doctor, knowing that his diploma was granted after an ODL educational program? Why do you think that a ship owner will act differently when he will have to employ a young Third Officer, graduated from the IAMU Virtual maritime University?

Even the management of our universities through a "market funded and centered" policy could be a mistake. We can all see what the effect of such a policy was, in the last years. Many maritime universities renounced to train seafarers and changed their curricula towards maritime economics, maritime law, ocean science or engineering. In many European countries (UK, Germany), such a process was dictated by the lack of students that want to embrace a seagoing carrier. indeed we have to try to find some extra financial resources in order to compensate the lack of governmental funds. But this could be done by courses on demand, master courses or other postgraduate courses and not by transforming the general maritime curriculum to the needs of the present market.

Globalisation and massification of education means, in my opinion, in the first place, unrestricted access to information, especially in the education field.

If we accept to organize the IAMU Virtual University as a major source of free source of information, in the maritime field, such an action will not bring profits. For implementing a VMU we will need:

- expensive hardware;
- expensive software;
- hundreds of hours of work for building the WEB site of the VMU;
- a permanent team for maintenance and updates.

In such a case, it is very possible that IAMU could not find financial resources for creating such a WEB site.

That's why we want to propose you the followings:

- for the beginning, let's try to remove the protections of our own, already existing electronic libraries, to all interested visitors and to prove that IAMU members really promote unrestricted international cooperation and exchange of knowledge in the maritime field;
- if you have documents that are under copyright protection, you can use a software for e-books, that is much more cheaper than a security or online learning software. The e-book will permit the online reading of the book, page by page and the printing of desired page. A very good example of this facility could be seen on the WEB site of US National Academy Press (www.nap.edu/). In this Library we can already find good nautical books and I think that a link towards this site must be mentioned on our own INTERNET pages.
- documents without copyright problems, could be put in our online libraries with no restrictions. This information, in electronic format, must be available for direct download. In this category we can include:
 - course supports or PowerPoint presentation of this courses;
 - papers (or the PowerPoint slides) presented at different Conferences;
 - articles published in maritime journals;
 - best students final projects or graduation papers.

For non-native English speakers no extra effort for the translation of these documents is required. In the first place, an abstract (or even the title) in English will be sufficient, plus contact information, in order to facilitate the connection with the author.

Sometimes, even a picture, drawing or scheme could be sufficient for solving a problem or dilemma, without the reading of the afferent text in a foreign and unknown language.

In a second phase we can bring all this documents together an a special HTML page opened on IAMU WEB site. If we will have to much material to transfer, we can adopt another method. On the IAMU electronic library page we will maintain only a list of the available publications, with links towards the maritime univerities e-libraries.

I think that such a attitude from our universities in respect of knowledge dissemination will be very useful for many maritime students and seafarers. From my point of view, this is the very meaning of a University as partner in the society.

Maybe, in the near future we will find some applicable methods for certifying, let's say, First Deck Officers or First Engineers: distance learning for updating the theoretical knowledge, short stages of training and assessment using

simulators, online tests for evaluation. I think that we can discuss about the best practical solutions for such a task. But the basic maritime education and supervised training for the Officer of the Watch must be maintained, **for at least another decade**, in the classical manner. And please, do not make the mistake to consider the "classical" learning process similar with "old fashioned" methods.

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