## The Development of Links between Maritime Facilities in Europe. A UK View

Steve Bonsall<sup>1</sup>

#### Abstract

The development of the wider understanding of MET on a global basis depends on closer links between Maritime Departments and Faculties. So much is clear and has been known for some time. The physical development of that premise is much more difficult to achieve.. In Europe the Erasmus programme helps both the framework of collaboration and the finance required to carry out that collaboration. Unfortunately the development of maritime collaboration has been largely unsuccessful in UK establishments. This lack of success is due to two main reasons; firstly, the paucity of undergraduate degree programmes in the maritime discipline leading to the UK maritime universities tending to deliver programmes to non seafarers with seafarers studying at the sub degree level and secondly the fact that UK students, for the most part, only speak English and thus exchange of students means that largely the flow is to the UK not from the UK. A further barrier to student flow is the synergy between programmes.

The first problem is getting worse rather than better with the few maritime universities finding that the bulk of seagoing students prefer to attend a Nautical College. Additionally the UK certificate system does not require that the teaching and learning of underpinning knowledge is tied to an undergraduate degree. From September 2006 the UK Chamber of Shipping preferred route into the UK Merchant Navy is via a Foundation Degree (FD) rather than the BSc (Hons) Nautical Science, however the first of these FDs are provided by Nautical Colleges rather than the maritime universities even though these universities will provide the validation accreditation. The second problem is starting to get better as parts of programmes in European universities are beginning to be delivered in English. A one-way flow of students has begun but two-way is yet to start, however the mechanism is in place to allow this to happen. UK students have to be persuaded that it is worthwhile spending some of their academic time in another

<sup>&</sup>lt;sup>1</sup> Dr., Head of Maritime, Transport and Management. School of Engineering. Liverpool John Moores University. Byrom Street, Liverpool L3 3AF (s.bonsall@ljmu.ac.uk)

institution. Evidence shows that students do benefit from short term student exchange however it is necessary to provide the opportunities for this to take place and to actively promote the process.

Key Words:- Student Exchange, Erasmus, CPD, STCW, Foundation Degree

## **I.O.** INTRODUCTION

The flow of students between educational establishments worldwide particularly at the university level is something that has happened for many years. This has always been the case with students studying languages but has also occurred in most other disciplines. In the maritime field it is relatively new although there are examples going back several years. Whilst foreign universities have had ongoing connections with UK universities the flow of students, except for languages has been heavily weighted towards the flow into the UK rather than UK students moving out of the UK.

## 2.0. LITERATURE REVIEW

Student exchange is reasonably widely written about in all sections of the academic press. Students have been visiting and studying at establishments other than their own for many years however it would seem that the movement of maritime students is relatively recent.

## 2.1. PROCESSES

There are various ways in which students can study in other establishments. Generally there needs to be a formal link. This is becoming important with UK universities particularly as all students must be registered and this becomes difficult without the formal link. Important aspects such as library cards and e-mail facilities are dependent on formal registration which cannot take place without formal enrolment to a programme of study and payment of fees even if these are waived through an agreement such as Erasmus.

Thus the formal link is an important first step in the development of student exchange. Often this is achieved by a visit from an academic of one institution to another. The reason for the contact is usually ad hoc in that it will occur through acquaintance or chance meeting. A speculative request to an institution may result in an offer to host a visit and from that links can be made. The Erasmus initiative is widely used within Europe with 150,000 people taking advantage of this opportunity annually (ERASMUS 2007)

#### 2.1.1. GENERAL EXPERIENCE

Students from all disciplines can study outside their parent institutions. Sixth form students have performed engineering projects in Helsinki (Professional Engineering 1997) whilst other students have travelled to Africa from the USA (Timiraos 2006) & (Dana 2007). Students in Australia have been reluctant to travel (Guest 2006) although this article was specifically referring to science students. Indian universities have cooperated with US universities on collaborative research (ACS 2006) and this has included graduate student exchange programmes. Students from Holland have travelled to Arizona on exchange programmes from community colleges (CCW 2007).

#### 2.1.2. Erasmus Experience

Within the EU and some associated countries such as Norway students can exchange between universities participating in the Erasmus programmes. The Erasmus initiative was set up in June 1987 with 3244 students taking part in the first year (ERASMUS 2007). There are now 31 participating countries and the programmes encourage student and teacher mobility. 90% of European higher education establishments work within the scheme and it gives many European university students their first chance to live abroad (ERASMUS 2007). Over 1.5 million students have participated and this is expected to reach 3 million by 2012.

Examples of student Erasmus exchange are Civil Engineering from Prague (Huml 2006) and Astrophysics from Bucharest (Rusu & Stavinschi 2007). The University of Salford UK has also had some experience (Sykes 2003).

## 2.2. COUNTRIES

The opportunity to study overseas exists for all countries and nationalities and it is in the hands of individual establishments and students to establish whether a place can be found. Some countries seem to excel in making opportunities available to students. These include the Baltic countries of Norway and Sweden and the European continental countries of Poland and Germany. French students also seem to be able and willing to study abroad. Chinese students also study abroad however except for isolated instances such as Main Maritime Academy (Tyler pers comm 2007) they seem to attend full time courses rather than short or exchange programmes. The USA does have opportunities via "Fulbright Scholarships" (Fulbright 2007) where students, teachers, professionals and scholars can receive grants to teach, lecture and conduct research overseas from the USA. This programme was started in 1946 to "enable the government of the USA to increase mutual understanding between the people of the United States and the people of other countries" (Fulbright 2007). Study in more than 150 countries is now possible for US citizens. There is some evidence of students using Fulbright for the finance of their maritime programmes (Hoffman pers comm 2007a)

## 2.3. PROBLEMS

Problems of student exchange programmes include for students the difficulties of language and finance and for institutions lack of interest, drain on resources and administration.

#### 2.3.1. FINANCE

Finance is an important and possibly an overriding consideration in any student exchange. Some programmes (Tyler pers comm 2007) have required students to cover their incidental expenses whilst institutional fees have been waived where reciprocal exchange is possible. In Europe the Erasmus programme provides student funding which covers some but not all of the costs (Sutton pers comm 2007). Fulbright scholar-ships are available for study with USA institutions and these provide some funding.

The costs that have to be considered with the exchanges are course fees, accommodation, travel to and within the overseas destination and general living costs. Students will have already paid or will be prepared to pay for course fees once but naturally not twice. Accommodation fees may be problematic particularly for short courses as university accommodation is normally paid for a whole year and short term payment may be difficult. Polish maritime students studying at LJMU for semester one only and Swedish maritime students studying for semester two only have overcome this problem by renting in the private sector. Normally accommodation costs are carried by the student and they have overcome the problem at home and overseas. One student (Sutton pers comm 2007) achieved this by living at home for the home based part of course.

#### 2.3.2. Student Numbers

Exchange student numbers are generally small and in the region of 2 to 7 (Jinks pers comm 2007). Cohorts of students larger than this are usually a one way flow. One American naval college receives around 60 students from Turkey annually (Hoffman pers comm 2007a) taking part in courses on Marine Transportation and Marine Engineering. A Russian college does have an exchange programme sending 6 students to Korea and receiving 17 students (Malyavin pers comm 2007). The UK maritime experience is very patchy with a few students going to the USA some years ago but not now (Hoar pers comm 2007). LJMU and Plymouth maritime have not as yet had any students go overseas on exchange programms.

#### 2.3.3. LANGUAGE

Language is a problem for UK students studying overseas but is an attraction for overseas students studying in the UK or other English speaking countries. Whilst students to whom English is foreign language do not cite being taught in English as a reason for exchange study, it is clearly one advantage to them. Within the maritime industry particularly, a good working knowledge of English is a decided advantage when looking for jobs. Even in the UK students can find ready work if they speak both English and another language. For UK students studying overseas the language difficulty can be the deciding factor that stops the exchange. Clearly if they cannot understand the lectures then there is no point in going.

## 2.4. MARITIME STUDENT EXCHANGE EXPERIENCE

Maine Maritime Academy was able to send two American students to Dalian Maritime University (DMU) for 5 months in the spring of 2006 (Ross & Salkaln 2006) and intends sending more students in the future (Tyler pers comm 2007) however this seems to be somewhat of an isolated instance. The main maritime experience is with overseas students studying at English speaking establishments (Hoffman pers comm 2007a) & (Hoar pers comm 2007). This provides them with technical knowledge which they can use on their programmes, the experience of studying abroad and also the opportunity to speak and learn in English which they can then use at a later date. English is often taught in primary and secondary schools worldwide because it is a good second language, whereas English speaking nations find it difficult to adopt a second language at the secondary level. Instances of a second language being taught at primary level in the UK are rare but increasing (Bevis & Gregory 2004). French, German and Spanish languages are widely taught at secondary level, however the learning of modern foreign languages is no longer compulsory and past experience has shown that even when a language has been studied to first high school exam level at 16 years old, it is rarely used later in life (Hook 2006). The problem for English speaking nations is that almost wherever they go they can find someone to speak English, thus reducing the necessity to learn another language.

## 2.5. Benefits

#### 2.5.1. TO STUDENTS

There is no doubt about the benefits students gain from studying in a country not their own. Table 1 shows the survey items/ questions asked in a 2004 survey (Dwyer & Courney 2004) of 3,400 US students for the Institute for the International Education of Students (IES). The survey response rate at some 23% was very high and noted that "studying abroad is usually a defining moment in a young person's life" (Dwyer & Courney 2004).

An outsider's view of native English speaking maritime students studying in China for a short while noted "They learned so much about the Chinese people, the culture and the educational system" (Tyler 2006). It would seem that the benefits are not connected with the technical content of the course they study and it may even be that this is less relevant or even irrelevant to both students who go abroad and to the programme leaders who make overseas study possible.

	Area	Specific Benefit	
1		Increased Self-confidence	
2		Served as a catalyst for increased maturity	
3	Personal Development	Lasting impact on world view	
4		Enhanced interest in academic study	
5	Academic	Influenced subsequent educational experiences	
6	Commitment	Reinforced commitment to foreign language study	
7		Helped me better understand my own cultural values and biases	
8		Influenced me to seek out a greater diversity of friends	
	Intercultural	Continues to influence interactions with people from different	
9	Development	cultures	
10		Acquired skill sets that influenced career path	
		Ignited an interest in a career direction pursued after the	
11	Career Development	experience	

Table 1. Possible Benefits to Students from Study Abroad	
(Dwyer & Courney 2004)	

#### 2.5.2. TO INSTITUTIONS

Institutions gain through having a culturally diverse student population, however this is mainly achieved through foreign students studying full time courses at institutions rather than students studying for short periods such as a semester. In fact the number of exchange students as a percentage of all the students in a class is in some cases so small that their presence makes little or no difference to the class (Lees pers comm 2007). Institutional gains seem to be related to gains by students (Hoffman pers comm 2007b): "the sharing of cultures is a very rich experience for both the American and Turkish students" (Hoffman pers comm 2007b).

## 3.0. DATA COLLECTION AND METHODOLOGY

Interviews were conducted face to face; by telephone and by e-mail. A questionnaire was e-mailed to all IAMU member institutions and seven replies received. This is a 15% response rate which is good for questionnaires where a 3% response is often the case. This primary data provides the underpinning support for the ideas and considerations held by the author and tend to support the experience at LJMU Maritime.

## 3.1. LJMU School of Engineering Experience

The School of Engineering at LJMU has been receiving students for short period study for about 20 years. This has been through both the Erasmus scheme and other specific arrangements with individual institutions.

Table 2 lists the short course programmes of the "student exchange" type currently running or previously run in the LJMU School of Engineering. Two of these programmes are from the maritime section and take students studying maritime business and/ or logistics whilst a further course (no longer running) accepted French students. All students on these programmes will study alongside existing full time students. Sometimes special modules are developed for these students however normally the students are still taught alongside full time students. An example of this is where the CPD Maritime Business has the module "Shipping Business and Cruising". This module is the combination of half of two existing modules called "The Business of Shipping" and "Leisure Industry (Maritime)". These two modules are taught over 2 semesters which form the academic year in LJMU. The CPD Maritime Business however is taught only in semester one.

			running	una previous	ly run.			
		Programme			Students			
	Туре	Level	Years of Operation	Institution from	Nationality	No	Remarks	
1	CPD	3 UG BEng	2	Angers	French		No	

 Table 2. LJMU School of Engineering Short Courses (Exchange Type Programme) currently

 running and previously run.

2	60 credit Top Up	Honours BEng	3	TAR	Malaysia	100+ pa	No
3	CPD Maritime	2 & 3 BSc	3	Maritime University Szczsin	Polish	3 ра	Theoretically Erasmus
4	CPD Maritime	2 & 3 BSc	4	Chalmers Lindholmen University	Swedish	Var. 1 – 7 pa	No
5	BSc Transport Unclass. Pathway	2& 3 BSc	5. Not now run		French	Var 1 – 3 pa	Curtailed in 2003

New collaborative programmes listed in table 3 are planned. The opportunity for UK students to study overseas is an element of two of the four planned or newly available programmes. These latter programmes are both within the Erasmus initiative.

## 3.2. Other Experience in LJMU

LJMU has many links with institutions overseas. These links are spread across the University however student exchange links are generally associated with the European Erasmus initiative. In 2001/2 about 160 students went overseas from these LJMU programmes falling to 75-80 in 2005/6. The vast majority (80%) of these are language students. This is in line with the UK average, which is between 65 & 85% (Harley pers comm 2007). The UK trend in students going abroad to study on the Erasmus programme is in decline with 12,500 going overseas in 2001/2 against 9,500 in 2005/6 also 70% of the students are female.

The two main problems cited are language followed by funding. The EU grant paid to Erasmus students has been increased and now stands at 433 Euros per month and tours are usually around 3 months. Usually the participating student places are undergraduate however, there are some postgraduate places plus summer research. The latter are attractive as this means that the academic year is not disturbed and thus students do not have the problem of accrediting their study abroad.

	Programme		Students			Remarks
	Туре	Level	Institution from	Nationality	Student Exchange Expected	
1	CPD Maritime	2 & 3 BSc	Vestfold University College	Norwegian	Yes Erasmus	1 Nor. student due in Jan 2007

Table 3. LJMU School of Engineering. Collaborative Programmes Planned

2	CPD Transport 2 Programmes	2 & 3 BSc	Available to all	Available to all	No	Speculative Validation March 2007
3	Work Placement BEng	Not yet agreed	Ford Factory in Valencia	Spanish	Yes Erasmus	UK students will study a 3 month summer placement & Spanish students will study a semester or year

## 3.3. Erasmus Mundus and Bologna

Erasmus Mundus is a further initiative available for postgraduate Masters' students only. It involves three institutions in three different EU member states. The programme is open to EU and non EU students who must study in at least at two of the three institutions. All three must have the same programme. There is a 1500 euros per year grant available to the student with a maximum of 5000 euros. Non EU students can get all of their tuition fees paid and a grant towards their living costs of 3000 euros.

No	Objective			
1	Adoption of a system of easily readable and comparable degrees			
2	Adoption of a system essentially based on two cycles			
3	Establishment of a system of credits			
4	Promotion of mobility			
5	Promotion of European co-operation in quality assurance			
6	Promotion of the European dimension in higher education			
7	Lifelong learning			
8	Higher education institutions and students			
9	Promotion of the attractiveness of the European Higher Education Area [EHEA]			
10	Doctoral studies and the synergy between the EHEA and the ERA (European Research Area)			

Table 4. Broad Objectives of the Bologna Process (Bourke 2006)

In the late 1990s, within Europe, an education philosophy was introduced called the Bologna Progress. This is an agreement between EU countries with the idea of creating a European Higher Education Area (EHEA) (Europe Unit 2007). In 1999 29 European countries met in Bologna and signed the agreement. It now has 45 signatory countries and decisions are made outside the formal decision-making framework of the EU.

The Bologna Process objectives or actions aimed to facilitate greater mobility of students across Europe and to foster the acquisition of skills required by employers. These skills included cultural maturity, increased confidence and language skills. The process provides a useful forum for networking and exchange of good practice across Europe.

## 4.0. Student Exchange and Maritime Programmes

Many academic disciplines are involved in student exchange however it seems that the maritime discipline has only played a minor role. The reasons for this are not clear but the element of "training" rather than "education" may be one reason. UK maritime seagoing education is concentrated in the Nautical Colleges which are part of the UK Further Education (FE) system rather than the University Higher Education (HE) system. Only three UK universities offer maritime undergraduate programmes of the type available for student exchange programmes. Even where these programmes exist, lack of synergy with similarly named overseas programmes may make student exchange problematic.

The inability of UK students to find programmes with a similar curriculum is one of the reasons cited by programme managers (Lees pers comm 2007) & (Dowell pers comm 2007) causing difficulties and reluctance of students to study overseas for short periods. It would appear that some European countries have programme lengths of 3.5 years with a further half year available for students to study in another country. UK degrees do not have that element and thus any time taken out of their programme is time lost and this needs to be regained as an extension to their home programme. This is a problem also noted in other countries (Tyler pers comm 2007).

UK maritime seagoing programmes take place often over periods less than the standard academic year and include a quite rigid curriculum with quite definite learning outcomes. This can then provide more difficulties for student exchange.

## 4.1 MARITIME PROGRAMMES AND UNDERPINNING KNOWLEDGE.

Maritime programmes leading to seagoing Certificates of Competency are naturally structured to lead to the learning outcomes required by those Certificates of Competency. The underpinning knowledge provided and assessed is one of the elements inspected by accrediting bodies. In the UK the Maritime and Coastguard Agency (MCA) accredits programmes leading to the STCW certificates of OOW, Chief Mates, Master and Chief Engineer. The programmes of study will have quite rigid curriculums and exam time-tables which leave little or no space for students to study overseas. It is likely that only if an equivalent curriculum can be found, which is also accredited by the MCA, could students on these programmes be enticed to study abroad. An opportunity for student exchange to take place exists where the curriculum is under the control of programme

managers. This is the case with maritime business degrees. Even here difficulties are found. One respondent to the questionnaire noted that where maritime students know that they are going to have onboard training their travel abroad appetite is already satisfied (Barsan pers comm 2007). This may be the case however onboard training does not cover the intercultural issues cited as important aspects of study abroad.

## 4.2. LJMU MARITIME AND TRANSPORT PROGRAMMES AVAILABLE FOR INCOMING STUDENTS ON A STUDENT EXCHANGE.

The accreditation of the study abroad is a problem to incoming students to LJMU and those studying overseas from LJMU. Programmes at LJMU are constructed from modules of 12 or 24 credits with each level requiring success in 120 credits. The University's main academic year is September to May in two semesters with semester one lasting from September to December and semester two stretching between January and May. Modules can last for one or two semesters and are assessed by coursework and examination or entirely by coursework. Honours degree programmes are of 360 credits gained over three levels with the work at each level becoming progressively harder. Whilst there is no prohibition to studying subjects at a higher level where the introductory knowledge has not been studied, it is preferred that this programme study takes place. Thus where students enter a programme at level two or three their previous study is inspected to assess whether they will be able cope with the programme. This same assessment needs to be made with exchange students. Accreditation of study overseas has been a difficulty for many programme managers when considering student exchange (Lees pers comm 2007).

Incoming students have been offered a range of modules from specific programmes (Lees pers comm 2007) & (Dickinson pers comm 2007) or put onto a specifically developed short programme under the Certificate of Professional Development [CPD] initiative (English pers comm 2007). Different schools have adopted these varying ways of allowing students to study for short periods in the University. The CPD process does allow the University to provide a certificate and official transcript. If individual modules are studied then a transcript can be provided however it will not have been discussed at all the examination assessment boards nor will a certificate be available, except for a Certificate of Attendance. As institutions become more electronically administered it becomes difficult to work outside the system. LJMU has a student administration system called OSS which has embedded in it the structure of all the University programmes including the modules. Programmes and modules may be existing (current), in preparation or redundant. Students are registered onto a current programme having a list of modules, which will be either core [must be studied] or option. Often at level one there are only core modules. At present there are two maritime CPDs and two transport & logistics CPDs, each lasting one semester, available for exchange students. Table 5 lists these CPDs.

	Semester One	Semester Two		
1	Maritime Business (MB)	Marine Insurance, Maritime Project and		
		International Trade (MIMPIT)		
2	Road Transport and Logistics(RT)	Rail and Intermodal Transport (RIT)		

Table 5. LJMU Maritime & Transport CPDs

# 4.3. PROGRAMMES AVAILABLE FOR LJMU STUDENTS WISHING TO STUDY AS AN EXCHANGE STUDENT OVERSEAS.

LJMU students wishing to become an exchange student overseas face the problem of finding an institution that will accept them and also fitting in the study overseas with their home programme. In Earth Sciences as many as 10 students (Dowell pers comm 2007) & (Dickinson pers comm 2007) have expressed interest in study overseas but none have actually taken up the option as they have found that they would lose substantial time in their own courses as modules and study could not be accredited in LJMU. The maritime section has agreed with a Norwegian University College the possibility of UK maritime business students studying in Norway for one semester in semester two of their final year. This opportunity is open to Norwegian students from the same college and in 2007/8 two students will take up the opportunity. As yet there are no UK students indicating the wish to go to Norway, however there is interest from incoming students. For the programme team at LJMU overcoming the programme synergy problem has been less difficult than at first envisaged. The LJMU student will study 60 taught credits of the 120 credits required by the programme in semester one in Liverpool. In semester two in Norway two modules accounting for 24 credits will be studied: the remaining 36 credits coming from the final year project which will be started in Liverpool and completed in Norway. The LJMU student can therefore undertake the preliminary project work in Liverpool at level 2 and make initial progress on the project during semester one. Contact can be retained by e-mail with the LJMU supervisor and a further Norwegian supervisor can be provided by the Norwegian University College. The two modules studied in Norway have been validated as modules in Liverpool thus overcoming the problems of inputting the marks into the Liverpool OSS database.

## 4.4 PROBLEMS FOR LJMU UK STUDENTS STUDYING OVERSEAS.

As well as the programme synergy problem of overseas student exchange, students will face accommodation problems. LJMU students have withdrawn from short term overseas study already because of this problem (Lees pers comm 2007) and it is not clear how this will be overcome for the Norwegian programme. Ordinarily LJMU students must pay university halls for 42 weeks accommodation even though courses are only 33 weeks long. The extra period is to cover time waiting for examination results. This payment is upfront and non-returnable. Private accommodation is available however and a student going to Norway for semester two would have to find accommodation for just one semester and this may be difficult. The idea of incoming exchange students moving into accommodation vacated by the LJMU student going overseas has not worked in the past (Lees pers comm 2007). One UK student (Sutton pers comm 2007) not on a maritime course lived at home during the UK semester in the year she undertook the exchange semester.

The language problem has been overcome with the Norwegian exchange as the teaching for the two modules agreed will be in English. Other English speaking maritime students studying overseas have also found it possible to get teaching in English in a maritime university (Tyler pers comm 2007). This of course detracts from one of the benefits to be gained by study abroad and that is the development of language skills. USA marine students on exchange in China did get 200 hours of Chinese language teaching (Tyler pers comm 2007) and this local language teaching may be something that is taken up by any LJMU students going to Norway. Unfortunately as discussed in section 2.3 ordinarily UK students do not speak foreign languages well enough to be able to interact within a classroom environment. Where students can speak the language (Sutton pers comm 2007) then the experience is enhanced.

## 4.5. UK FOUNDATION DEGREE IN NAUTICAL SCIENCE

There is a clear possibility of UK maritime business students being able to study as exchange students if the problems of accommodation and language can be solved. UK seagoing students wishing to study as exchange students will still have to overcome the added problem of synergy with their studies unless they are prepared to extend their programmes. The UK has recently [September 2006] launched the Foundation Degree initiative which will provide the underpinning knowledge for OOW and Chief Mates/ Chief Engineer. The layout of this programme is individual to each institution delivering the course and is different to the previous HND layout. There is much less classroom contact and far more student centred learning. This may mean that finding suitable equivalent programmes overseas becomes easier however the programme is

so new that those elements have still to be considered. LJMU will offer a FD Nautical Science from September 2007. The STCW requirement for seagoing maritime training does mean that the same learning outcomes are required by courses in all countries (Barsan pers comm 2007). This should then make it easier for institutions to cooperate and exchange students as the problem of compatible syllabi is removed. The UK BSc (Hons) Nautical Science and FD Nautical Science programmes embrace STCW and can possibly be used for exchange students if institutions work together effectively.

## 5. Conclusions

It is clear that student exchange is possible between maritime faculties and has taken place. What is less clear is the extent to which maritime faculties worldwide and in the UK in particular are willing and able to take part in such programmes and make them available to students. The institutional reluctance is centred on the gain to the institution from the effort exerted and this is reflected in the answers given in the data collection. Some maritime faculties particularly feel that there is nothing to be gained from such co-operation. Others however have embraced the concept and find gains however these tend to be concerned with the gains to students rather than any gains to the institution itself.

The advent of a Foundation Degree [FD] in the UK may present opportunities for maritime exchange however as reported some Faculties feel that students will gain the opportunity to travel with their role in the Merchant Navy thus their desire to travel abroad for study may be diminished. Students studying on the BSc (Hons) Nautical Science routes and those studying Maritime Law, Business or Logistics may have a greater appetite for travel.

The desire to set up student exchange courses is not universal amongst institutions. Students clearly benefit from these exchanges and there is some funding available. If these benefits, including the funding help available, are presented to students more effectively then perhaps more will embrace the opportunity.

## References

- 1. ACS (2006) Northwestern, IIT Bombay Agreement. American Ceramic Society Bulletin. Nov. Vol. 85. Issue 11. pg 12.
- 2. Barsan E (2007) Personal Communication. e-mail attachment to questionnaire.
- 3. Bevis R. & Gregory A. (2004) Meeting of Minds. Times Educational Supplement. 6th April. P6-7.
- 4. Bourke T (2006) Guide to the Bologna Process. The UK HE Europe Unit.

- 5. CCW (2007) Netherlands Exchange Programme Extends to Arizona Administrators, but not Students. Community College Week. 26th March. Vol 19 Issue 15 p4.
- 6. Dana F (2007) A Global Exchange. Diverse: Issues in Higher Education. 2nd August. Vol. 23. Issue 26 pg 16-17.
- 7. Dickinson N (2007) Personal Communication. Professor of Earth Sciences. LJMU. Interview with author 21st May
- 8. Dowell S. (2007) Personal Communication. Director of School of Earth Sciences. LJMU Interview with author 23rd May.
- Dwyer M.M & Courney K.P (2004) Benefits of Study Abroad. New Survey Confirms Significant Gains. Transitions Abroad Magazine March/April. Found at http://www. transitionsabroad.com/publications/magazine/0403/benefits\_study\_abroad.shtml. Accessed on 19th May 2007
- 10. English R (2007) Personal Communication. Collaborative Programme Manager. School of Engineering. LJMU. e-mail 19th may.
- 11. ERASMUS (2007) 2007 The Erasmus Programme Celebrates its 20th Anniversary. UK Socrates Erasmus Council 4th May. Available at www.erasmus.ac.uk/whatis.html. Accessed on 17th May.
- 12. Europe Unit (2007) Bologna Process. Available at http://www.europeunit.ac.uk/ bologna\_process/index.cfm. Accessed on May 17th.
- 13. Fulbright (2007) About Fulbright. The Fulbright Programme. Available at http://us.fulbrightonline.org/about.html. Accessed on 19th May.
- 14. Guest D (2006) Fostering International Student Exchanges for Science Students. Journal of Studies in International Education. Vol.10 Issue 4, pg 378 – 395.
- 15. Lees A (2007) Personal Communication. Professor of Sports Science LJMU. Interview with author 24th May
- 16. Harley M (2007) Personal Communication. Erasmus Coordinator LJMU. Interview with author May 21st
- 17. Hoar J (2007) Personal Communication. e-mail to author 25th May.
- 18. Hoffman J.C (2007a) Personal Communication. e-mail to author 25th May.
- 19. Hoffman J.C (2007b) Personal Communication. Questionnaire answer 25th May
- 20. Hook S. (2006) Loss of Languages hits job prospects. Times Educational Supplement. 11th March. Issue 4710, Special Section. P3.
- 21. Huml M (2006) Foreign Cooperation at the Faculty of Civil Engineering of the Czech Technical University in Prague. Czech Business and Trade Supplement. Pg8
- 22. Professional Engineering (1997) Insight into Finland Professional Engineering. Vol. 10 Issue 2 pg4.
- 23. Jinks T (2007) Personal Communication. Interview with author May 20th.
- 24. Malyavin E (2007) Personal Communication. Questionnaire information supplied to author June.
- 25. Ross C & Salkaln R (2006) Mariners Abroad. IAMU News. No 13 October

- 26. Rusu M & Stavinschi M (2007) teaching of Astrophysics at the University of Bucharest, Rumania, in the last 50 years. AIP Conference Proceedings: Vol 895 Issue 1 p24 26.
- 27. Sutton L (2007) Personal Communication. LJMU PhD Sports Science Student who studied overseas in Spain as an Undergraduate. Interview with author May 24th.
- 28. Sykes A (2003) Erasmus exchange with Salford. Synergy News April 10.
- 29. Timiraos N (2006) Map Widens for Study Abroad. Wall Street Journal Eastern Edition. 19th Dec. Vol. 248 Issue 144 pB8. Tyler L.H (2006) Introduction to Mariners Abroad IAMU News No 13 October
- 30. Tyler L.H (2007) Personal Communication. e-mail to author May 18th.