EQUAL TRAINING IN AN UNEQUAL WORLD?
AN EXAMINATION OF GLOBAL MET STANDARDS

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BACKGROUND

In recent years shipping disasters have captured the headlines in an unprecedented manner and sparked considerable public concern in relation to standards of safety and training in the maritime sector and specifically in relation to vessels engaged in the carriage of potentially hazardous and high pollutant cargoes such as oil and chemicals. The loss of the *Prestige* is but one of a series of environmentally damaging incidents to have hit the headlines in the last decade.

Often the cause of these incidents and accidents has been laid at the door of the industry's training standards and seafarer competence. So serious and sustained has the concern been, that it has extended into the realm of popular culture as exemplified by the film *Naked Gun Two and a Half* in which there is a brief depiction of standards of training in the maritime sector as being comically inadequate. This is to be regretted and does nothing to improve the already tarnished image of an industry popularly perceived (and not always correctly) as substandard and exploitative. It reflects the high profile nature that marine disasters been given in the media and the extent to which they threaten human life and local economies and inflict terrible damage to the environment. Other industries, such as hospitality, automotive parts and electronics may have similar records of underinvestment in high quality training for their employees (Baum 2002, Cockrill 2002) but somehow such cases fail to capture the public attention or imagination. Inevitably, the human and environmental 'cost' of maritime disasters results in demands from the general public for higher standards and greater levels of regulation and control.

INTRODUCTION

This paper is based on the findings of a year-long pilot study of cadet education and training that took place in Singapore, the UK, and the Philippines[1], in the year March 2002-3. The research entailed a series of ethnographic site visits and the use of in depth, anonymised, confidential, tape-recorded interviews with employees of maritime education and training centres (METs), trade unions, the IMO, shipping companies and professional organisations such as the Nautical Institute[2]. A total of four colleges and one training centre took part and thirty interviews were conducted, and transcribed[3]. All selected colleges had good local and international reputations and as such were considered to be amongst the best in the represented nations. Following the completion of the data collection transcripts were analysed and coded and field notes were reviewed and considered in congruence with standard practice and prior to the reporting of findings.

The study considers the specific question of whether (at least at baseline level) training can be made 'equally good' across maritime education and training centres (METs) of a heterogeneous nature and situated within widely variant contexts? In reflecting on this question the paper first considers some of the problematic features of regulation as it applies to the implementation of the STCW code. It then focuses on employer perceptions of standards in maritime education and training and finishes with a consideration of the issues faced by all METs in providing maritime training to large numbers of the world's future seafarers.

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[3] 13 interviews were conducted with MET staff, 12 with employers and five with trade unions, the IMO and the nautical institute

STCW, REGULATION, AND ENFORCEMENT

I doubt there is anybody remotely connected to the maritime world who has not heard of STCW '95 or the original STCW code as agreed by members of the IMO in 1978. They may well have also heard the concerns that many have expressed in relation to the enforcement of STCW '95 and its perceived effectiveness with regard to its broad aim of raising, and to this extent standardising, general standards of watchkeeping and training in the merchant shipping sector.

There are two major issues in relation to the implementation of the code that deserve particular consideration. The first issue relates to the effectiveness of any 'enforced self-regulation' (Hutter 2001). The second concern relates to the difficulties generally experienced by regulators in relying on the 'regulated' for the provision of information and the effectiveness of any 'paper-based' regulatory monitoring and enforcement exercise (Lange 2002).

Enforced self-regulation as it applies to STCW and the maritime sector involves maritime administrations in submitting paper work that demonstrates compliance with STCW requirements. Parties to the convention are required to engage in self-regulation in that they are expected to audit and monitor standards of maritime education and training and to grant, or deny, training and education institutions 'approved' status as appropriate. The IMO has made suggestions as to what maritime administrations might reasonably consider in their assessment of METs. The list as described on the IMO website includes:

- Scope and objectives of training – e.g. to meet the requirements of STCW regulation II/1
- Minimum entry standards – age, sea experience, other training, medical fitness etc.
- Intake limitations, student/staff ratio etc.
- Staff qualifications, experience in subject, teaching skills, assessment skills
- Facilities and equipment necessary to meet objectives
- The written programmes, syllabus, timetable and course material
- Method of training, lectures, practical, videos etc. and percentage of time devoted to each.
- Assessment methods: examination, practical, continuous assessment etc.

- Certification to be issued on completion to meet STCW requirements
- Maintenance of student and other records
- Security of information
- Quality standards system requirements to ensure standards are maintained (IMO 2003:http://www.imo.org/HumanElement/mainframe.asp?topic_id=296

Such thorough assessments could be expected to produce uniformly high minimum standards in METs. However efforts to encourage administrations to fully implement such audits, and to close down institutions failing to meet guideline standards face a number of problems some of which are common to many regulatory regimes operating on the basis of enforced self-regulation. These have been documented in relation to other industries. For example in the UK rail industry the extent to which such enforced self-regulation fails to deeply impact upon self-regulators has been highlighted (Hutter 2001). Where safety protocols and procedures are externally produced and 'imposed' it seems that they often fail to be internalised. This results in lip-service being paid to regulation rather than wholehearted commitment. The results of this study suggest that similar problems also exist in the regulation of METs.

Other difficulties have been identified in relation to regulation that relies on the provision of information by the regulated to the regulators. It has been posited that where regulators find it difficult to extract such information from the regulated they may simply relax their rules to accommodate such deficiencies (Lange 2002). In the case of the IMO there is an additional pressure to relax regulations with regard to specific administrations. This derives from the importance of particular nations to the international supply of seafaring labour. Pragmatic approaches to enforcement are not uncommon. For example, in his study of environmental pollution control Hawkins documents officers taking into account the impact on the local economy of any punitive sanctions that may arise from their actions (e.g. the closing of a factory and consequent unemployment) before deciding on a response to a clear infringement of pollution regulations (Hawkins 1984:197:8).

The evidence from this study certainly indicates that the 'enforcement' of STCW is not achieving its stated aims in improving standards of maritime education and training or seafarer competency. The example of corruption in the conduct of certificate of competency examinations in the Philippines illustrates the point. This

was made clear in Lloyds List when Oliver Wadeson interviewed the current President of the Philippines. He explains:

> Philippines President Gloria Macapagal-Arroyo has taken the lead in attempting to rehabilitate her country's maritime image following last year's deck officers' examination scandal. International concern was such that Asia-Pacific neighbour Australia placed a ban on the hiring of Filipino seafarers…[Mrs Arroyo] said that the Philippines National Bureau of Investigation had been asked to secure an 'airtight case' against the examiners believed to have been responsible for leaking questions to examinees in the case. Australia lifted the prohibition order on July 3 after being assured by the Philippines' Professional Regulations Commission of the integrity of the Professional Marine Licence in the south-east Asian country. 'The PRC, in its reform, voided the 2002 professional licensure exams for marine deck officers' Mrs Arroyo said. 'most examinees have re-taken the exams and appropriate charges have been filed against the errant examiners' (Wadeson: 2003)

That such events can occur in 'white listed' countries must raise questions about the effectiveness of self-enforced regulation. It also highlights the extent to which such regulations may be seen as having no real 'teeth'. Indeed so bureaucratic are such regulatory forms that they might reasonably be thought to have what we might call 'paper teeth': pretty perhaps, but largely ineffective.

THE PERCEPTIONS OF EMPLOYERS

The evidence of the study suggests that employers recognise that cadets come from a variety of different socio-economic and educational backgrounds and believe that they cannot be regarded as meeting one generalised or minimum standard regardless of the intentions of the IMO in introducing STCW. Exemplifying a commonly expressed view, one employer suggested that the reason his company recruited in Pakistan and India rather than the Philippines was that the standards of education were higher there. He explained that the company hadn't:

> Got any Filipino cadets although we have been looking at the new …college down there that may be sponsoring a couple of them but the standards are no where as high as Pakistan or India…That's the standard of education and also [on] the maritime side down there.   (Interview with Sampson 2002)

Others were more carefully discriminatory, identifying particular colleges rather than countries as problematic. In discussion of the Philippines, for example, consideration of cadets was often limited to those graduating from a list of colleges that employers had identified as maintaining high educational standards. One explained:

> In the Philippines we are quite selective. I am not sure of the ones [i.e. the colleges] we have blacklisted, but there is a list we don't touch.
> (Interview with Sampson 2002)

Some employers dealt with their perception of problematic standards by putting new recruits from specific countries through a 'top-up' training programme at the company's expense. As one employer explained:

> Countries like China and the Philippines we actually have to do additional training before we put them on board our ships. (Interview with Sampson 2002)

There was a feeling that STCW had done nothing to change this situation. As one employer put it:

> Seafarers have training to meet the STCW amendments, [but] are they really improved themselves?   (Interview with Sampson 2002)

Furthermore, STCW was actually resented by some employers who believed that the training resource put into seafarers as a result of STCW regulations could have been better spent elsewhere. Often STCW was felt to have delayed the implementation of other planned training developments and was little more than a matter of inconvenience to them.

In recognising the variation in maritime education between and within maritime labour supply countries, employers highlighted the relationship between resources and standards. As one explained:

> A good library [is important] and…next is equipment. Of course [name of institution] are alright. Another [meaning other] maritime school almost all over [i.e. everywhere] …very poor!...Very poor equipment and very poor…instructors also. They have no experience…So if with not good equipment, if with poor instructor, it's the same – cannot expect good result (Interview with Sampson 2002)

This is the factor which above all others is indicated in this study to be critical in the delivery of quality maritime education and training. It could be seen in three contexts:

1. The economic context of colleges
2. Their physical resources
3. Their human resources

Each of these impacted greatly on the ability of METs to deliver quality results and will be considered here in turn.

ECONOMIC CONTEXT

The METs included in the study were located in three different countries with different socio-political and economic characteristics. World Bank data suggests that whilst the UK and Singapore are relatively close in terms of economic indicators the Philippines suffers from relative economic deprivation. For example, Gross National Income (GNI) stands at US$21,500 and US$25,120 in Singapore and the UK respectively and at only US$1,030 in the Philippines. Similarly indicators on infant mortality rates, per capita electricity use, access to improved water supplies and sanitation, and access to telecommunications, conveyed a similar tale (see Table One).

Table One: selected economic indicators for Singapore, the UK and the Philippines*

	Singapore	**UK**	**Philippines**
Per capita GNI (2001) US$	21,500	25,120	1,030
Infant mortality rates (2001) per thousand live births	3	5	29
Per capita electricity (2000) kWh	6,948	5,601	477
Access to improved water supply - all areas (2000) %	100	100	86
Access to improved sanitation – urban areas (2000) %	100	100	93
Fixed line or mobile telephone per 1000 population (2001)	1,195	1,358	192

Source : www.worldbank.org/data/countrydata/countrydata/html. NB most recent available data is utilised i.e. that for 2000 or 2001 as available.

The economic context of METs is important in several ways. It impacts directly on colleges in terms of their own access to power and infrastructure such as telecommunications and the internet. It affects the level of resource they have access to in terms of government funding and support. It also affects them in less direct ways such as in the standard of education of their student intake. Thus the level of the wealth of a nation in which an MET is sited is critical in determining the standard of graduate it produces. As one college lecturer in a wealthy nation put it:

> The advantage we have is fantastic resources, because of the wealth of the nation maybe. That's how we get it. Which, I suppose, if it was available in poorer countries, I mean those countries who are actually serving this industry [as labour supply countries]…it would be so much better.   (Interview   with Sampson 2002)

PHYSICAL RESOURCES

This study indicated that there was a tremendous range in the quality and quantity of physical resource that could be accessed by participating METs. In some there were classrooms with powerpoint projectors and screens as standard, radio microphones for lecturers' use, and student access to good simulation and lab equipment as well as the use of excellent libraries, comfortable desks, environmentally controlled working environments (heated or air-conditioned depending on the climate), and the internet. By contrast the research also found examples of classrooms with irregular access to power and thus electric light, poor equipment for environmental control, few modern teaching aids, such as overhead or powerpoint projectors, and very basic student facilities. In one observed class pupils shifted uncomfortably in their chairs as the fans cut out during a power failure and the windows had to be pulled almost shut to keep out the worst effects of a tropical downpour. In the absence of electric light and in the dim visibility resulting from the weather conditions outside it was quite impossible for students to make out what was written on the chalk board at the front of the class. None of them complained or asked if they could move forward they simply endured the circumstances in silence, looking uncomfortable and unhappy, for the remainder of the class.

In order to summarise field note observations in a visually accessible form, selected resources available in colleges were considered and based on analysis of field note entries were given a numeric score ranging from 0-10 (see Table Two). The resources assessed were, desks/chairs, air-conditioning/heating, available space, projectors, environmental noise, chalk/white boards, other visual aids. These criteria are not identified separately in the table and appear in a random order to protect the identity of individual institutions.

Table Two : Distribution of physical resource amongst participating METs

	College A	*College B*	*College C*	*College D*
Criteria 1	10	10	10	0
Criteria 2	7	8	8	2
Criteria 3	5	8	10	0
Criteria 4	5	5	8	0
Criteria 5	7	8	10	5
Criteria 6	4	9	7	10
Criteria 7	7	7	7	3
Total Score	46	55	60	20

The table illustrates that in a possible numeric range of 0-70 the highest rated college achieved a score of 60 and the lowest, 20 (see Figure One).

Figure One : Total Scores for Colleges A-D
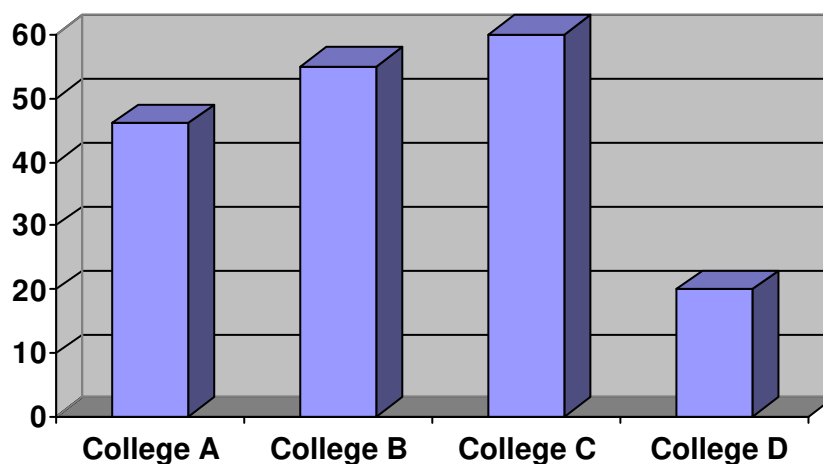
These scores represent a very significant range of college resource that has a marked impact on the learning opportunities available to students and the teaching capacity of staff. Simulation equipment was one area to which considerable financial resource had been devoted by all participating colleges. However, in some institutions pressure to allocate large sums of money to such equipment tended to result in sacrifices being made in other budgetary areas. Thus investment in basic classroom and teaching facilities as well as in teaching staff themselves was often understandably, but regrettably, sacrificed.

HUMAN RESOURCES

The level of human resource available to some colleges was so low as to markedly constrain their educational provision. In this they faced a number of problems ranging from limitations on the salaries that they could offer staff, associated staff inexperience, and lack of resource for staff development and training. In two colleges experienced marine staff were supported through extensive teacher training programmes resulting in recognised teaching certification. One of these institutions had a very generous human resource development budget and in the other staff were also supported in their professional development. However in the two other colleges, staff were offered much more limited opportunities for development that were generally restricted to courses meeting the minimum IMO recommendations for 'training the trainer'. Inevitably this impacted upon the skills of teachers and thus on the experience of learning in the colleges. It was interesting to note that in one of these resource-restricted institutions several members of staff had previously experienced longer teacher training courses abroad, supported by external grants. In their classes the student experience was markedly different to the average experience within the college. Modern teaching methods including the effective use of group work, visual aids, and competent classroom management, visibly impacted upon levels of student participation and engagement with the studied topics. Students were motivated and enjoyed learning, their demeanours transformed by enthusiasm and contrasting with the stoic bored expressions of their peers in other lessons.

CONCLUSIONS

Whilst it was only an exploratory investigation, the study clearly highlighted the extent to which STCW has failed to achieve standardisation in maritime education and training across the world and within individual nation states. Here there are important issues relating to enforced self-regulation. However, the greatest barrier to the improvements in levels of educational provision in the maritime sector, in line with the spirit of STCW, is raised by the economic inequalities persisting between maritime nations. While such differentials in resource remain, and in the absence of systematic cross subsidisation[4] it seems likely that companies in pursuit of quality cadets will have to continue to choose their labour sources carefully and/or provide additional training at their own expense. STCW alone cannot but fail to achieve its stated aim of raising overall levels of education and training in the sector. It is clear that a great deal more remains to be done.

POSTSCRIPT

Following the completion of this project SIRC (Sampson and Veiga) put together a proposal for a human resource development programme in selected METs using European-ASEAN university network (EU-AUNP) funding. The bid was approved for funding in July 2003 and over a period of two years will deliver:

- Staff development in teaching and research methods
- A series of workshops to consider cutting edge research findings and develop college curricula in relation to these
- Hardware in the form of a laptop computer to each participating college
- Computer software for statistical analysis[5] and a computer-based training programme relating to its use
- Practical guided research experience

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[4] Some subsidisation has occurred in places such as the Philippines and China from a variety of source nations most notably perhaps Norway and Japan.
[5] Statistical Package for Social Scientists (SPSS)

SIRC is pleased that several METs will be in a position to benefit from this funding. This represents a direct link between the identification of problems using policy related research tools and practical attempts to address them: An approach to research and policy development to which SIRC remains committed.

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