

MET and the forces of globalisation: or, the DFE versus the FOG!

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Abstract

We do not just live and work in an economy; we live and work in a society. The essence of this paper is that the forces of globalisation can be viewed as both presenting opportunities and creating challenges for maritime education and training. The relevance of the work is that it links the forces driving globalisation, education and the shipping industry with the forces driving the approach taken by the International Maritime Organisation (IMO) to maritime education and training (MET), at a time when the Standards of Training, Certification and Watchkeeping (STCW) Convention and Code is under review. Five challenges for maritime educators are posed, namely:

1. Are the corporate (invasive?) and societal (liberating?) views of globalisation truly dichotomous, or is there a balanced middle ground for education in the future?
2. Are universities and educators being subverted from their responsibilities to society by the forces of globalisation?
3. Are the forces of globalisation which are driving shipping also causing IMO to take a broader, less safety-oriented approach to issues of seafarer competence?
4. Are the forces of globalisation and STCW the dark forces of evil (DFE) or are they the forces of good (FOG)?
5. Has the time come for the International Association of Maritime Universities (IAMU), the International Association of Maritime Lecturers (IMLA) and GlobalMET to combine forces and develop a common view of maritime education for the globalised maritime community of the future?

Maritime education and training is not immune from the forces of globalisation and STCW. Because they are in no position to stop or reverse these forces, maritime universities need to determine how they position themselves in the increasingly global market. A fundamental issue which maritime universities need to address is whether or not they should collectively seek to modify the administrative, corporate and IMO forces which are driving maritime education and training, particularly for officers, away from the broader, more rounded approach to education which is fundamental to the very heart of universities.

1 Introduction

An earlier paper for the 2nd General Assembly of IAMU presented research highlighting the emerging shifts in education (Lewarn 2001). It was postulated that education was rapidly becoming globalised, massified and increasingly commodified, thus presenting both opportunities and challenges for maritime educators and their institutions.

It can be argued that the massification and commodification of education are two of the outcomes of ‘corporate’ globalisation; consequently this paper reports on work which seeks to better understand the forces of globalisation, their effects on maritime education and training, and how these challenges might be met by greater collaborative efforts.

2 Dichotomous views of globalisation

The term globalisation is in common use but there are quite different understandings of its precise meaning. Literature prior to the year 2000 uses the term in a variety of inconsistent ways, but some coherence was brought to the debate when Scholte (2000, p15-17) identified five broad, related and overlapping definitions of globalisation which can be summarised as:

- Globalisation as internationalisation. In this context globalisation is used to describe cross border relations between countries. It includes the growth in international exchange and interdependence with increasing flows of trade and capital investment. It encapsulates the concept of the globalised economy in which distinct national economies are subsumed by international processes and transactions.
- Globalisation as liberalisation. In this context globalisation refers to a process of removing government imposed restrictions on movements between countries in order to create an open, borderless world economy. The abolition of trade barriers and capital controls falls within this view of globalisation.
- Globalisation as universalisation. In this context globalisation is used to describe the process of spreading various objects and experiences worldwide to all corners of the earth. The spread of computing, the internet, television and even the English language, as the language of commerce and the sea, are examples which are included in this view of globalisation.
- Globalisation as modernisation/westernisation. In this context globalisation is considered to be a dynamic whereby the social structures of modernity (capitalism, rationalism, industrialism, bureaucracy etc.) are spread over the world, frequently destroying existing culture and local self determination in the process.

- Globalisation as deterritorialisation (or the spread of supraterritoriality). In this context globalisation entails the reconfiguration of geography such that social space is no longer wholly mapped in terms of territorial places, territorial distances and territorial borders. This view considers globalisation as the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa (Giddens 1990, p64). Academic disciplines are classic examples of this form of globalisation.

Whilst there is still debate about these five approaches to globalisation there is some agreement that the first four are essentially forms of territorialism whilst the fifth is not. This fifth approach takes a societal view and recognises that social connections have rapidly increased and that they are no longer related to territory. However, it is true to say that there is no clear agreement on whether the forces of globalisation are invasive or liberating.

What is clear is that globalisation is a multi-faceted set of processes which include not only the changes which have flowed from the new information technologies and the opening up of markets, but also new concepts which mean that shrinking space, shrinking time and disappearing borders are linking people's lives more deeply, more intensely and more immediately than ever before (UNDP 1999, p1). As Power (2000, p7) suggests, these globalisation processes will make our societies increasingly multicultural as interactions among cultural groups intensify and will also force shifts in our educational and development priorities such that the greatest global challenge facing education systems is that of learning to live together. These shifts can create both opportunities and difficulties for education and as Power (2000, p7) states: 'I believe that the opportunities created by global processes will be actualised only if we continue to insist that education is a basic human right and resist the tendency to reduce education into yet another market commodity. If we fail, I fear that our world will become increasingly unequal, competitive, polarised, conflicted and dangerous'.

Are the corporate (invasive?) and societal (liberating?) views of globalisation truly dichotomous, or is there a balanced middle ground for education in the future?

3 Effects on education

In a particularly insightful essay, Tabb (2001, p1) indicates that the university will be a very different place in another decade or two, and what it will look like depends to a large degree on what version of globalisation wins out. Governments around the developed world are requiring education providers to be more efficient by forcing them into the market model and away from the fundamental concept of education as a publicly provided social good. In short, education is becoming globalised, massified and treated as a commodity.

The nature and complexity of the forces involved in globalisation have conditioned the context in which educators operate as well as profoundly altering the educational learning experiences of students. In addition, it is observable that many makers of educational policy lean to a market driven approach to the provision of education. In summarising, Smith (2002, p2) suggests there are four significant issues regarding the practice and experience of education, namely:

- Commodification, including attempts to standardize ‘products’, and the corporate takeover of education.
- The threat to the autonomy of national educational systems by globalisation.
- De-localisation, changing technologies and orientations in education.
- Branding, globalisation and learning to be consumers.

These four issues apply just as well to maritime education and training: for example, IMO model courses are standard products available for sale like any other commodity; STCW is a global approach which has reshaped national maritime education and training systems; the use of flexible delivery techniques has made maritime education and training more accessible to more people where and when they want it; and maritime education and training providers have put considerable effort into branding their institution to increase its attractiveness to its potential customers.

Education today is in an era of rapid and sustained change where the old paradigms are increasingly irrelevant and are being replaced by new paradigms. These fundamental shifts in higher education are reflected by Inglis et al. (1999) and are summarised in the following Table 1.

Table 1. Old and New Paradigms in Higher Education	
<i>Old Paradigm</i>	New Paradigm
Take what you can get	Courses on demand
Academic calendar	Year round operations
University as a city	University as an idea
Terminal degree	Lifelong learning
University as ivory tower	University as partner in society
Students 18-25 years old	Students all ages
Books primary medium	Information on demand
Tenure	Market value
Single product	Information reuse/exhaust
Student as necessary evil	Student as customer

Table 1. Old and New Paradigms in Higher Education

<i>Old Paradigm</i>	New Paradigm
Delivery in classroom	Delivery anywhere
Multicultural	Global
Bricks and mortar	Bits and bytes
Single discipline	Multi-discipline
Institution centric	Market centric
Government funded	Market funded
Technology as an expense	Technology as a differentiator

Some see these shifts as positive whilst others see them as negative. The supporters of globalisation take the positive view that the market place has been responsible for making education more accessible to more people, increasing the use of a wide variety of approaches to deliver education where and when it is wanted, and providing education which primarily meet the needs of the economy.

The detractors of globalisation suggest that there has been a fundamental attack on the notion of education as a public good and upon the more liberal ideas of education. Learning has increasingly been seen as a commodity or an investment rather than a way of exploring what might be good for the society as a whole. The direction of the curricula and the readiness of universities to embrace a corporate approach have combined to degrade the work of teachers/lecturers to a point where it is relevant to question whether it can be rightfully called education (Smith 2002, p7).

Having briefly illustrated some of the opposing views of the effects of globalisation on education it is pertinent to be reminded of two axioms for educators, namely:-

- Educators need to be able to do what is right rather than just what is correct.
- The right of educators to academic freedom also brings an obligation to act responsibly.

In this context it is also relevant to be reminded of just what academic freedom means. The University of Notre Dame Australia (2008) defines academic freedom as follows:-

‘The University must be a liberal and unfettered place where basic values and beliefs are exposed, explained, researched, debated, freely challenged, and openly affirmed or rejected. No person within its community can or should be oppressed, vilified, demeaned or discriminated against because of their faith and values. All must be free and comfortable within the life of the University’.

Are Universities and educators being subverted from their responsibilities to society by the forces of globalisation?

4 Shipping: a Global Business

Shipping has been a global activity for centuries, but in the last fifty years there have been a number of significant shifts in the way the business of shipping is conducted. These shifts include:

- The demise of the traditional European shipowner and the rise of the Asian shipowner.
- The move to containerisation leading to the development of regional consortia and multi-national groupings.
- The rise of global shipping networks as a means of improving customer service and driving down costs.
- The shipment of ever increasing tonnages of low value, bulk commodities, particularly to the newly industrialised countries.
- The global approach to ship ownership and operation. Take, for example the relationship of shipowner and parent company: Russia - raises purchase price loan; Cayman Islands - builds the ship; Spain; establishes shelf company and registers ship – Panama; classifies ship – Norway; ship operated by management company – Hong Kong; crewed by crewing agent – India; employs Indian officers and Philippines ratings; ship chartered – Chinese importer; to transport Australian iron ore.
- The increasingly globalised attempts of IMO to improve safety of life, property and the environment.

It can be argued that most of these shifts may well have had positive effects on trade but almost certainly have had negative effects on seafaring. The international community's response to the perceived fall in the competence, quality and professionalism of seafarers was STCW 95 which attempted to change the focus away from what seafarers should know to what seafarers should be able to do.

The pressures on crews are well documented (Commonwealth of Australia 1992; International Commission on Shipping 2000) and include increasing 'compliance' workloads, shortages of qualified officers, 'hard driving' to meet schedules, as well as language and cultural issues caused by multi-national crewing. The outcomes of these pressures are many and varied, but increasing concerns about fatigue and accident rates indicate that the work done to date to alleviate these pressures is still inadequate.

In his opening address to the 39th session of the IMO Sub-Committee on Standards of Training and Watchkeeping (IMO 2008, p5), the Secretary-General expressed "concern on the anticipated shortage of seafarers of some 27,000 officers representing almost 6% of the total by the year 2015 and in light of the recent unprecedented rise in orders for new buildings, which would have to be

entrusted to competent seafarers to sail them in a safe, environmentally sound and efficient manner.” The Secretary-General also “drew attention to the outcome of recent analyses of accidents which indicated that, due to inappropriate levels of manning and watchkeeping arrangements, particularly on short sea voyages, fatigue had emerged as a significant contributory factor in accidents.” This view, that all is not well within the seafaring community, is frequently reinforced in the shipping press. As an example, Lloyd’s List DCN (2008, p17) reported that the “Latest figures collated by the Norwegian class society establish that losses from navigational accidents continue to rise at an alarming rate, and threaten to lift insurance premiums by as much as 30% this year alone. Accidents have doubled over the past five years, due to continued growth of the world fleet and a shortage of officers with the right skills.”

The current review of the STCW Convention and the STCW Code is yet another attempt to overcome a problem by taking a prescriptive, rule based approach. Taking a pragmatic view, Secretary-General Mitropoulos (2007, p4) suggests that what really matters is the attitude adopted towards compliance and that simply obeying the letter of the law is not sufficient as it is the spirit of the regulations which should be genuinely embraced. He further states “In the end, of course, it all comes down to individual people. If they do not perform their tasks properly and with meticulous care, the end result can be disaster.” It can be argued that this is the basis of the case for seafarer education to be wider and more encompassing than training for technical competence alone.

Arguably, it is time for a genuinely thorough review of STCW and of maritime education and training overall – one that recognises current and foreseeable developments in the shipping industry as well as in educational methodologies and delivery techniques. This may also suggest that the time is right for STCW to concentrate on, and emphasise, safety issues rather than the multitude of broader onboard operational tasks and skills which are properly the purview of employers (Lewarn 2008, p26).

Are the forces of globalisation which are driving shipping also causing IMO to take a broader, less safety oriented approach to issues of seafarer competence?

5 Globalisation and STCW: Facing the Challenges

Cogburn (1998, p4-5) suggests that graduates of even the best of existing education systems are likely to find themselves deficient in knowledge as well as the cognitive skills necessary for the increasingly complex living and working environments they will encounter. More importantly, the complaint is often heard that graduates lack the capacity to learn new skills and assimilate new knowledge. Within the globalised framework for knowledge, education and learning it is postulated that at least ten components should be included or enhanced such that the system:

- Is an agile and flexible system

- Breaks the boundaries of space and time
- Blurs the distinction between mental and physical labour
- Encourages work in teams
- Uses virtual teams around the world
- Places a greater focus on abstract concepts
- Takes an holistic rather than a discrete approach
- Enhances the ability to manipulate abstractions
- Enhances the ability to acquire and utilise knowledge
- Produces scientifically and technically trained persons

The minimalist, task oriented approach of STCW to maritime education and training can be seen as an adaptation of the globalised market driven approach to education as it is almost entirely workplace focused. STCW does not take into account the wider societal approach to education which, of course, it is not designed to do. The wider societal approach is left to the universities which is almost certainly the best option. But with the pressures of market forces, costs, politicians, and employers who believe that all a seafarer needs is a certificate of competence, it is increasingly difficult to provide the rounded education which seafarers both need and deserve. Learning how to learn seems to be taking second place to learning how to do.

Work done by GlobalMET, a worldwide association of approximately 100 maritime education and training institutions with its membership located in 33 countries, highlights that for maritime education and training to be more effective:

- STCW must promote education and training that is in step with the human resource requirements of the shipping industry;
- STCW must emphasise clear, realistic learning outcomes rather than inputs;
- STCW must emphasise the importance of using clear, valid, reliable and consistent forms of assessment to improve competence, which are universally recognised and adopted;
- STCW must recognise the diverse range of modern flexible educational delivery methods as valid forms of learning;
- STCW must be able to be updated quickly in response to innovation and change in the shipping industry and in education and training.

It is fundamental to recognise that seafarer education and training must be outcome driven rather than the current input, process, regulation driven approach beloved of many maritime administrations (Lewarn 2008, p26). Haughton (2008, p9) supports this view when he states that “Standards are set, procedures planned, codes constructed, matrices manufactured – but these are surely only the frameworks and vehicles to get where we want. If instead we articulated our vision of where we want to get to then we might be able to leave people to design ways of getting there by themselves. IMO should be congratulated in its efforts to move more towards a goal-focussed approach to performance. Let’s hope this extends to education and training.” The great

danger in the prescriptive approach is that it tends to focus on the lower order skills of Bloom's taxonomy i.e. knowledge, comprehension and application, rather than the higher order skills i.e. analysis, synthesis and evaluation. In this context, the validity of IMO model courses could be questioned.

In a number of countries maritime administrations have taken the view that the courses which they approve must follow exactly the relevant IMO model course. In reality a model course is only supposed to be a guide upon which teachers can build to develop appropriate teaching and learning strategies. The highly prescriptive nature of model courses is not only at odds with the basic concepts of competency based training, upon which STCW is based, but also focuses on lower order skills (Lewarn 2002, p3). Houghton (2008, p9) further suggests this can lead to a dislocation between knowledge and meaning which, in turn, leads him to conclude that whilst things are relatively normal seafarers are relatively safe, but when things start to go wrong the higher order cognitive skills simply are not there.

Maritime education and training is not immune from the forces of globalisation and STCW. Because they are in no position to stop or reverse these forces, maritime universities need to determine how they position themselves in the increasingly global market. Perhaps a fundamental issue which maritime universities need to address is whether or not they should collectively seek to modify the administrative, corporate and IMO forces which are driving maritime education and training, particularly for officers, away from the broader, more rounded approach to education which is fundamental to the very heart of universities.

Are the forces of globalisation and STCW the dark forces of evil (DFE) or are they the forces of good (FOG)?

6 Conclusion

It must be clear that few maritime education and training institutions possess either the resources or all the skills necessary to fully grasp the opportunities and challenges presented by the rapidly changing globalised education environment. It also seems evident that to maximise the potential benefits which these opportunities present and to overcome the challenges being faced, far greater collaboration between maritime education and training providers is necessary (Lewarn 2001, p212). For example, there is a view amongst some members of GlobalMET that every maritime education and training provider that is not already part of a nationally accredited tertiary institution, such as a university, polytechnic or college of further education, should be formally linked with an accredited tertiary institution as a means of ensuring/improving consistency and quality (Lewarn 2008, p26).

Whilst this is not a formal view of GlobalMET, it is worth recalling that the establishment of this organisation arose from the desire of the original members

to support the aims and objectives of IMO for 'safer ships and cleaner oceans' and recognition of:

1. The vital importance of maritime education and training in fulfilling the needs of expanding trade and economic growth;
2. The urgent need for collective efforts in maritime education and training to promote greater safety at sea and protection of the marine environment.

The significance of high quality maritime education and training is also recognised by the 46 institutional members of IAMU (2008) where they note that:

1. The shipping industry is a service industry, in which human resources are the critical element;
2. It is only feasible to secure, and to preserve, highly qualified human resources in the maritime industries through effective education and training; and
3. Effective education and training in the maritime sector derives from:
 - scientific and academic rigor;
 - development of a clear link between practical skills and management techniques; and
 - a focus on quality

In a similar vein, IMLA, with its 542 individual members, is essentially a no-border forum: a round table for discussions on sea-related topics as well as a way to establish or maintain contact with colleagues who face the same challenges and difficulties in their work. Teachers and other parties from all over the world dedicated to transfer knowledge to future seafarers are invited to freely present their achievements, share and discuss experiences and exchange ideas. To this end, IMLA is an umbrella for the International Conference on Engine Room Simulators, the International Navigation Simulator Lecturers Conference, the International Maritime English Conference, as well as the biennial Maritime Education and Training Conference (IMLA 2008).

All three organizations clearly value education in the broadest and best sense of the word but independently work towards improving the quality of maritime education and training.

In a speech to the 7th General Assembly of IAMU, the Honorary Chair said “I believe that the development of well-balanced and highly qualified seafarers is possible only if they are taught the pride and philosophy of being a seafarer, not just the skills and knowledge necessary for safe vessel operation. In addition, to nurture and utilise seafarers who will continue to support the development of the new maritime community, we need to review and raise the standards of the conventional maritime education system. We need to develop a new systematic curriculum. One that includes comprehensive education about the sea. One that

encompasses such fields as marine environment, maritime administration and policy, international law and safety management. This new curriculum will play a key role in developing a new maritime community” (Sasakawa 2006).

This clearly fits with a societal rather than a corporate view of education. Consequently, has the time come for IAMU, IMLA and GlobalMET to combine forces and develop a common view of maritime education for the globalised maritime community of the future?

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