

Forging Academic and Maritime Business Alliances

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ABSTRACT

It is hypothesized that IAMU goal of the worldwide excellence of maritime education revolving around safety management at sea and providing quality education and training are better achieved by strategic alliances between academic institutions and maritime businesses. Strategic alliances may be defined as forging association to further mutual interests.

Businesses and academic institutions have their unique strengths and weaknesses. Most commonly, educational institutions provide a service in the form of research, training, consulting, and intellectual property. Business organizations in return share knowledge about their state-of-the-art technology, operational processes, and employment opportunities for students. Many arrangements are possible ranging from business-supported educational research to licensing and patent developments.

Implementation of this approach is most likely to create a win-win situation for all parties involved in the experience. Essentially it will lay the groundwork for a healthy exchange of ideas between faculty, students, and business professionals. It will contribute to the infusion of additional revenues, and need-based innovative courses and programs resulting in improvement of educational standards and career development for students.

This arrangement will also lead to a collaborative research across disciplines. It will benefit not only faculty and "partnering" businesses, but also provide exciting opportunities for students who can assume a larger role under expert guidance. It will enrich the student psyche for research content and lead to a sense of commitment and conscientious dedication to the profession.

Given the complexity of global markets, demand for innovation, adaptation, and need for continuous improvement, both students and teachers must be creative in learning new behaviors, adapting to changing environment, and going beyond the demands of routine academic profession. This means that while content knowledge is important, process of sustained learning will define success in professional life made possible through strategic alliances.

1. Introduction

Historically, educators at colleges and universities have served an important, often critical, role as collaborators in research and problem solving for government and industry. In fact, one of the conclusions reached by the Commission on Industrial Competitiveness in the early 1980s was that both business and education could benefit from partnerships. Experience suggests that mutual benefits will accrue in such basic areas as faculty development, better-educated competent graduates, and cost-effective applied research for operational improvement.

This arrangement is nowhere more relevant than in the maritime industry. 'Maritime industry' refers specifically to all those organizations involved in the system of transporting cargo and people by water. In terms of present day practice, considerations must include the intermodal system of transportation from

origin to destination. It is a segment of the international trading system, and as such must be considered in the context of total world trade. Managers in the maritime industry, therefore, need to understand the whole picture of worldwide transportation and trading systems, with all the forces that influence decision-making (e.g. shipping productivity, optimizing the use of increased capacity, greater speeds and fast turn around capability, impact of broadened scope of intermodal transportation and its interrelationship with trucking, rail and air transportation industries, etc). Based on one industry observer, considerable resources have been invested in major advances on the ship technology side perhaps at the cost of innovations in management techniques. This may be attributed to the conservative nature of the industry, and how set it may be in its own way of doing things. Perhaps one might view this as a challenge enough for colleges and universities to motivate the industry leaders to join hands in an effort to move us all to an elevated plateau.

2. Literature Overview

What is the role of an academic institution in the maritime industry? One might succinctly express it as to provide students with the essential material and experiences they need to become “safe, well-trained seafarers.” In an eloquent introspection, Professor Lewarn suggests that maritime education and training (MET) institutions have failed in their attempt to raise skill and competency of mariners. In fact, he spares no one including faculty and other professionals in that indictment. Channeling and directing our collective energies toward the MET attributes, activities, tasks, and objectives, he urges benchmarking as a way to further IAMU’s mission. Indeed, he acknowledges that the quality of institutional performance is “limited by resources, management commitment and staff capabilities.”(11)

Maritime education and training (MET) is concerned with educational innovations, particularly those aimed at communicating abstract academic knowledge in a way that is helpful and meaningful to pragmatically oriented professionals and prospective seafarers. The dominant innovative tradition in this respect has been the development of experiential learning approaches including internship, and almost a yearlong sea duty.

Today, most maritime schools offer a mix of educational approaches --- the traditional lecture often combined in new and innovative ways with computer-based simulations. With these new educational technologies, maritime educators have begun to raise their aspirations from increasing student awareness and understanding to improving their commitment to the protection of life, property and the natural environment. These new aspirations create new challenges for the design of maritime education and training program, where the criteria for success are based on performance rather than cognitive comprehension. Yet the future poses an even greater challenge. The rapid growth of knowledge and increasing rate of social and technological change are making specific skill training more and more vulnerable to obsolescence. The answer seems to lie not in learning new skills, but in learning how to learn and adapt throughout one’s career. An emerging concern in maritime education and research is, therefore, how individuals and organizations learn (10), and adapt ever so readily to the future needs of a maritime technical society.

Professor Hara (7) defines this futuristic maritime technical society as the society where rapidly proliferating technology will transform ship centered, self-completed function of today into a global transportation system integrating both land and marine transportation. Accompanying this will be the responsibility of the future merchant mariners to operate complex, technologically advanced ship systems, manage increasingly sophisticated organizations, and deal with highly technical problems such as oil/chemical pollution abatement, collision avoidance and satellite communication/navigation, etc. As one of the philosophers has said - “the genius of the future lies not in technology, but in our ability to manage it.”

How much of what has been written about technology has become reality? How much may soon come to pass? How much will remain conjecture or fiction? It is undeniable that the impact computers and information

technology will have on organizations of the future will be far-reaching and profound, affecting virtually all segments of our society. Also, as a result of downsizing and leaner/flatter structures, broader roles required of both workers and managers, and a more culturally diverse labor force – a workplace of today is quite unrecognizable from that which existed a few years ago (14).

Entry-level employees are being required to take on more responsibility and cooperate more closely with one another. More importantly, they must be able to see beyond their specific duties to demonstrate a business understanding of how their company and industry work, and how their jobs relate to the large corporate mission.

How many of our colleges and universities, let alone MET institutions, have resources to adequately prepare our students to such challenges? These resources encompass a wide array of factors such as informational, operational, physical, and indeed manpower. Compounding the challenge, many academic institutions have been hit hard by austere economic times and face stringent financial problems, in addition to being roundly criticized by industry for not keeping pace with its needs in the new global reality. Companies like AT&T, General Electric, General Motors, Motorola, Xerox and many others have their own “corporate universities” to re-tool their world-class workforce (14).

As colleges and universities, how responsive are we to the changing needs of maritime business employers or the new workplace competencies they require? How feasible is it to incorporate those needs in our curriculum to keep our students up-to-date and foster their smooth transition into an employer’s workplace? Are there resources enough for educators and administrators to cope with these challenges – both present and in the future? A strategic alliance is a plausible answer.

3. The Need for Alliances

Strategic alliances may be defined as forging association to further mutual interests. These alliances are long-term commitments to leverage the strengths of collaborating partners to create new business practices, insights and ideas. Participating organizations increase their prospects for success by mobilizing their knowledge, skills, and assets that are mutually beneficial.

The need for academic and business partnerships is growing around the world. As businesses require more sophisticated skills and specialized knowledge base for their managers, there is increasing concern about the quality of graduates. Many business leaders and educators have expressed concern that shortcomings in education impoverish the intellectual and human resources of a nation. A large number of businesses have poured money in the local schools and universities reimbursing employees for college tuition or executive education. But there is not enough ROI for them in terms of improved productivity or performance in the workplace.

It is estimated that U.S. employers spend over \$50 billion annually on formal and informal training. For employers everywhere, it clearly makes more sense to ensure that students get the proper education in their public schooling subsidized by taxes than expend more money and time for re-educating them at work. By getting involved in the educational process, businesses get better educated and better prepared employees at less cost.

Jeanne Meister, a pioneer in the area of corporate universities, identifies the following list of criteria for selecting a learning partner:

1. Shared vision where customer service, innovation, and continuous improvement are paramount to success.

2. Clear expectations for setting learning objectives and developing courses.
3. Flexibility and responsiveness in building a corporate/college alliance (this may include “teaching on site,” sharing libraries, laboratories or equipment).
4. Complementary needs and goals. This may range from funding joint research to developing customized executive education programs.
5. Reputation and prestige of the educational institution.
6. Ability to collaboratively develop a clear path of study leading to a “new” accredited degree program.
7. Openness to experimenting with technologies to accelerate learning.
8. Ownership rights in intellectual property clearly delineated at the onset of the partnership.
9. Financial and non-financial measures carefully spelled out in advance and agreed to by the key players.
10. An infrastructure that is open to experimentation (for example, having the corporation assign a full-time equivalent to the academic institution to work on partnership matters).
11. Global education capabilities and network.
12. Commitment to building an open dialogue and continually renewing the partnership with fresh thinking.

The emphasis is on flexibility and creating a dynamic curriculum that is tied to the strategic issues of interest to the stakeholders (i.e. corporate partners). The familiar refrain – “It’s the way we have always done things” will have to change to focus more on the student learner and less on the lecturer. This change must reflect a willingness on both our parts to commit to a larger cause, such as team performance or the well being of a community, above self-interest.

4. Alliances for Maritime Progress

Maritime academies - both federal and state - in the U.S. have recognized for some time virtues of seeking input from savvy alumni, businesses, and appropriate government and union executives to mold their respective curricula in keeping with the changing times. One illustration of such alliance was established between the U.S. Merchant Marine Academy (USMMA) and Sea-Land Service before it was acquired by A.P.Moller-Maersk in 1999. This relationship contributed significantly in the development of a formal program and academic major in logistics and intermodal transportation. Sea-Land’s participation covered a large spectrum of activities including curriculum development, identification of competencies expected of USMMA graduates, development of “live case study”, workshop in communication and interviewing skills, shipboard training, internship, etc. For Sea-Land, the value of this association resulted in a dependable pipeline of new talent to meet its future workforce needs (8).

It is reasonable to expect that similar approaches are adopted by sister colleges and universities around the globe. To quote Marcel Proust – The real voyage of discovery consists not in seeking new lands, but in seeing with new eyes.

Maritime businesses are now on a threshold of exploring newer vista of business opportunities unfolded by the Internet several years ago. The industry is captivated by promises of cost savings, operational efficiencies, and high profits. But the general gloom and doom of dot-coms has maritime executives looking for strategic partners to stay competitive.

In a July 31, 2001 report, eyefortransport described how APL, a global container transport company, has improved employee productivity and performance by adopting online learning as a strategy for staying ahead of technology growth, globalization, and customer demand. An informal collaboration with the third party provider, APL staff has fast access to the training and knowledge they need to quickly resolve critical

business issues, respond swiftly to market changes and promote customer satisfaction. By adopting the real-time collaboration capabilities, APL has streamlined its training. The new technology has saved them hundreds of thousands of dollars in travel-related training costs.

5. Why These Alliances Make Sense for MET Institutions

Peter Bott, one of the partners of Andersen Consulting (now called Accenture) recently said that alliances were "a way of the future". An alliance between a business firm and an academic institution is a two-way street that provides the educational institution with needed resources, while permitting a business firm to gain from work being done by faculty and students thereby improving their competitive position in a global context.

It is obvious that the aims and objectives of IAMU are to raise skill and competency of mariners to ensure:

- Survivability of ships in all circumstances and conditions
- Safety of passengers, crew and cargo
- Protection of environment by eliminating pollutants
- *Open and clear communication with diverse groups of crew*

Therefore the efficacy of achieving these lofty ideals will depend on the extent of ownership by all those affected by these goals and ideals, the extent of their commitment, and methodology used in communicating its urgency. There is an opportunity for all stakeholders – students, educational institutions, maritime businesses, and all participants in an organization's value chain. There is an opportunity for all to make a concerted effort to harness, channel, and stimulate higher levels of achievement motivation. Both educational institutions and businesses need to join hands in approaching this challenge together to strive and create the climate, conditions, structures, and procedures that allow and reward those in whose hands this grave responsibility is reposed.

There is no easy solution to many variables at sea. All those involved in a variety of tasks on a ship must be driven by their own sense of personal responsibility. The challenge to collective (i.e. business and education) organization is to capture this innovative spirit and nurture it along to their fullest capability from the start.

The following points, by no means exhaustive, highlight key benefits accruing to both MET institutions and maritime industry partners:

To MET Institutions

- An opportunity to develop innovative/contemporary "real world" programs and courses from a global perspective and thus fulfill business and societal needs.
- Offer value-driven and cost-effective education, and generate revenues from training and skill development programs.
- Involve faculty in applied research, consulting, and updating knowledge of the industry operations
- Beneficiary to the funding possibility from local, central and other government and business agencies for leadership role in regional and economic development.
- Possible gains due to economies of scale as one becomes well versed in the operation and more businesses join the consortium.
- Involvement in the enterprise over time brings a sense of pride and achievement not unlike that of an entrepreneur.
- Develop technology infrastructure
- Assist partnering companies to develop and communicate new expressions of strategic intent for the higher education market.

- Patentable products and technology of commercial value can be a source of significant funding, revenues and stem the rising cost of education
- Gain recognition as a leader in reshaping a new view of higher education by producing knowledge and competent graduate.

To Maritime Businesses

- An opportunity to exchange ideas with faculty and students with unbiased objectivity and gain Meta perspective on business problems.
- Share strategic knowledge about trends in the market and workplace
- Cost effectiveness of faculty monitored research compared to professional consultants
- Improve competitive position through cooperative R&D programs.
- Increase visibility on a college campus and attract talented graduates
- Mentor student projects, advance opportunity for internship, professional careers and jobs.
- Donate equipment for technology infrastructure and educational improvements.
- Patentable products and technologies created in universities across the world have potential commercial applications at minimum cost to the company

Some of these benefits spill over to faculty and student areas as well.

To Faculty

- An opportunity to test one's ideas and knowledge to solve the "real world" problems of business and society.
- Conduct action-oriented interdisciplinary research that may keep them on the frontiers in their field resulting in basic/applied research and tangible insights.
- Develop a niche in the marketplace by providing a creative research-based service.
- Expose their students to "live case studies" and through team work, review and analysis
- Able to use a company's practical setting as a real-life laboratories to test their theories
- Patentable products of commercial value could bring in revenue in the form of royalties for both the faculty and University

To students

- An opportunity for "live case studies" and experiential learning – gain experience working on something that has *real* value or importance.
- Improve both analytical and interpersonal skills and capabilities.
- Receive a value-based education and appreciation for strategic thinking.
- Exposure to self-paced learning and team-based activities.
- Job possibilities with partnering companies.
- Increased awareness of the realities and challenges faced by partnering companies and others in the industry

In a maritime education and training system, providing excellent education to students is a *raison d'être* for all colleges and universities everywhere. It should be the top priority of all educators. Alliance with businesses will enable us to lead students beyond lectures and textbooks by engaging them in a creative experience from the start that will mature with age and experience. These alliances can save corporations millions of dollars in future training costs and help students get more prepared when they enter the workplace environment.

In summary, there is a compelling need to find new ways to sustain value creation in the world. MET institutions have an opportunity, an obligation, to make their mark by assiduously improving their approaches

to education. Alliances with business will bring about changes that will challenge students to participate in their own learning. Energized together - universities, corporations and government - we can embark on a journey of discovery that will make a difference in the life at sea.

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