

Educating a Maritime Nation: Challenges and Opportunities

presented by

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Abstract

Much of what is called education these days is, in fact, training. They are two different but complementary things. Technical training is undeniably important to a modern, technological society but we must not overlook the practical importance of education in the humanities such as art, literature, history, philosophy, etc. Introducing a maritime element into the humanities curriculum in higher education institutions also has practical value. In addition, extending that principle downward into the national primary education curriculum could contribute not only to overall literacy rates but also to fostering maritime awareness as an integral part of the national culture.

EDUCATION, TRAINING, AND THE WISDOM TO KNOW THE DIFFERENCE

What is the difference between education and training? They are two different things and yet, in developing strategies for education, we too often confuse them. If we are to create meaningful education policies, we need to recognize the distinction.

Education can be defined as a formal and prolonged process of acquiring knowledge by learning and instruction. The word comes from the Latin *e-ducare*, which means to draw out, lead or draw forth. Education is epitomized by the Socratic and Oxford tutorial methods in which critical thought is developed by questioning, personal research, analysis and open debate. The educated person possesses more than just technical skill and knowledge of facts. To be educated also means to have cultivated taste, learning and culture.^[1]

Training, on the other hand, can be defined as teaching someone a specified skill and bringing them to a desired state or standard of efficiency by instruction and practice. Training is what we do in technical schools by teaching such skills as engineering, business administration or information technology. The word comes from the Latin *trahere*, which means “to pull”.

Note the difference between these two. Education is devoted to developing abstract critical and original thought, while training is focused on transmitting and developing testable skills. In considering how the two are instilled it is instructive to look again at the Latin roots: *educare* (to draw out) versus *trahere* (to pull). Education draws out critical skills that can be applied to non-quantifiable issues such as ethics, philosophy or historical analysis. Training pulls the student toward a desired standard of performance that can be certified by a professional body attesting that the graduate is technically capable. The French express the difference nicely by describing

someone as *bien educé* or *bien instruit*; well educated or well instructed.

This is not a value judgment. Neither education nor training is superior to the other. They are two legs of a single three-legged stool (the third leg being practicum or exercise). The well-rounded person needs both, for very good and practical reasons. As a former Commandant of the US Marine Corps has observed, "Training is preparation for the expected, while education is preparation for the unexpected."^[2]

THE HUMANITIES

A common policy trend in education policy these days is to favour science, technology and management over the humanities such as literature, drama, art, history, philosophy, etc. This is not only an aesthetic and cultural shame, but also an intensely practical mistake that disadvantages both society as a whole and the individuals who constitute it.

The Humanities and Society

While science and technology focus on explaining and exploiting phenomena, the humanities address their meaning and significance. Consequently, as Maria Teresa Russo has pointed out, "the humanities are indispensable for regaining the human factor in technological questions".^[3] In an age of sophisticated technology and awesome destructive potential, it is not enough simply to understand how and why things work. It is equally important to consider the implications of using them, the historical lessons that might apply, and the ethical considerations that arise. A society may employ its scientists, technicians and managers to produce a nuclear bomb, but scientific, technical and managerial expertise will not provide policy makers with the intellectual tools for deciding when, how or whether to use it. That is the realm of ethics, philosophy (including religion), and history. A technically oriented education, whether in science or business management, inevitably focuses on products and output. In this intellectual paradigm, efficiency and utility are the criteria for decision. Hanna Arendt, who studied the ethical lessons of the Nazi phenomenon in depth, has pointed out that "utilitarianism proves self-destructive precisely because it considers each end as a means to another end."^[4] Individual citizens, as much as societies as a whole, need to balance technological knowledge with a humanistic understanding of its implications. Average citizens may be unlikely to engage in structured ethical or philosophical reflection, but they do read books and look at films, television, and the performing and graphic arts. These are the primary means by which ideas and historical understanding are transmitted to ordinary citizens. A society that stresses utilitarianism to the exclusion of the humanities is a society with a limited mind, a shallow soul and an underdeveloped conscience. We need our philosophers, historians and artists as much as we need our Masters of Business Administration or Information Technology. This is not a luxury because "supporting a humanities and social science education is justified on sound economic grounds, not just on the civic and academic grounds usually used."^[5]

The Humanities and the Individual

There are sound practical reasons for cultivating the humanities, not just among those specializing in literature, art, history, philosophy, etc., but also for those studying utilitarian disciplines. A number of studies in Europe and North America have shown that students of engineering and science have paid a career price for being deprived of an education that includes the humanities.

Studies in the early 1980s showed that of all the presidents or vice-presidents of all the engineering schools in the United States, only ten percent had actually been educated as engineers. It appears that “among people of comparable intelligence, those with an education in the humanities were judged to possess stronger leadership qualities than those trained as engineers.”^[6] This observation has continued to be validated ever since. A Canadian study in the 1990s, for example, found that education in the humanities translates into job prospects and that “like fine wine, humanities and social science graduates appreciate with age as their skills deepen, generating a steeply rising income over their working life.”^[7] Another Canadian study in 2001 showed that while humanities and social sciences graduates may do less well in finding employment in their field initially, once they pass the age of 45 they experience less unemployment than those with more utilitarian training. Again, the reasons were clear: “the development of more generic, but valuable, skills may actually give the liberal arts and science graduates a leg up on their more vocational counterparts since such skills are much less likely to be rendered obsolete by technological or trade induced shocks.”^[8] In Europe too, the “idea of an exclusively technical and highly specialized engineering education is being abandoned and the need to integrate technical preparation with humanistic formation is making itself felt.”^[9]

As far back as 1990, Professor J. Ben O’Neil, himself a PhD in electrical engineering, observed that it is “not uncommon to see engineers stranded in mid-career because of a narrowness of perspective and a lack of leadership qualities...Most engineers are limited in their career not by a lack of technical knowledge but by an inability to reason verbally, communicate their ideas to others, and furnish leadership. These skills seem to be better developed in the humanities than in engineering courses.”^[10] That lesson remains true for our scientific, technical and business students today. We owe them a proper education that includes a solid grounding in the humanities.

REFLECTIONS ON THE HUMANITIES IN PAKISTAN

The case for the value of an education in the humanities can be illustrated by the history of Pakistan itself. One of the greatest advocates for a vibrant and sophisticated Muslim state in South Asia was not an engineer, scientist or business administrator, but the poet and philosopher Muhammad Iqbal. And he was not an anomaly emerging from a vacuum, but rather part of a rich intellectual and cultural heritage that stretches back over centuries. One of his teachers, the poet Faiz Ahmed Faiz (1911-1984), held Masters degrees in both English and Arabic literature. Before him, Sayyid Ahmed Khan (1817-1898) pioneered modern education for the Muslim community in the subcontinent. As far back as the 18th Century, Shah Wali Ullah (1703-1762) was advocating such modern concepts as a social safety net and accountable rulers. Pakistan’s cultural history is rich with art, literature, philosophy and a tradition of liberal Islamic thinking.

“Islamic civilization”, as David Smock has observed, “was built by people with initiative, imagination and creativity who were interested in constructing creative lives and forging good relations with others.”^[11] Today, however, not one of the Organization of the Islamic Conference universities appears in the top 500 “Academic Ranking of World Universities”.^[12] A professor at Quaid-e-Azam University in Islamabad has noted that his campus has “three mosques with a fourth one planned, but no bookstore” and that “no Pakistani university, including QAU, allowed Abdus Salam to set foot on its campus, although he had received the Nobel Prize in 1979 for his role in formulating the standard model of particle physics.”^[13] Surely, given Pakistan’s rich intellectual and artistic heritage and the vision of its early leaders, this is a challenge that can be addressed, at least in part, by treating education in the humanities as being of equal value to utilitarian education. The argument for doing so was made by Iqbal himself seven decades ago:

“Our duty is carefully to watch the progress of human thought, and to maintain an independent critical attitude towards it.”^[14] As a matter of national policy, institutions of higher learning could strengthen the humanities and provide intellectual leadership and inspiration to the nation, the Islamic community and the world.

Literacy is a great challenge that Pakistan is making heroic efforts to address. Depending on the way that the statistics are compiled, the overall literacy rate in Pakistan today is in the order of 50–55% (Pakistan calculates the figure for the population above 10 years of age, while the international norm is to use age 15).^[15] Among other things this creates a security challenge, since illiteracy translates into ignorance, ignorance fosters fear, and fear generates insecurity. At first glance this issue seems far removed from a conference devoted to maritime issues but, in fact, it is highly relevant to maritime policy, offering both challenges and opportunities. Pakistan is a nation with considerable maritime interests. The sea is its gateway to the world, a source of food, and a reservoir of considerable living and non-living resources. The citizens of Pakistan need to share a common vision of the importance of the ocean and coastal zone, and that needs to be transmitted to the children into whose hands the country will one day be entrusted. One of the United Nations’ Millennium Development Goals is to “achieve universal primary education”.^[16] Perhaps those who are engaged in maritime awareness and education could consider developing elementary level reading material that would introduce children who have never seen the sea to the romance, adventure and vision of the wider world that the ocean represents.

MARITIME POLICY IMPLICATIONS

The nature of education and the practical value of the humanities are not abstract ideas, but practical issues that warrant policy decisions. What, then, can we conclude from this discussion? There are many possibilities, but the National Centre for Maritime Policy Research or other agencies represented at this conference might wish to consider the following.

1. ***Encourage the maritime aspects of the arts.*** Great authors like Herman Melville and Joseph Conrad have brought vivid mental pictures of the ocean into the minds of generations of people who have never even seen the sea. A Pakistan that encourages painters, photographers, writers, film makers and musicians to celebrate the sea will be a community that understands itself to be a maritime nation. In addition to public awareness and education, these artists may also contribute to the nation at a deeper policy level. According to one Muslim scholar, “because of our very narrow vision, our legalistic vision, and our authoritarian models of decision making, we are excluding those who can offer us a different vision of the future” and that “comedians, poets, and musicians should come forward to articulate a different view of reality.”^[17] The other aspect to fostering maritime aspects of the arts is to encourage those who are not professional artists to develop their talents as well as their vision of the sea. Ocean-related essay or art competitions for school children, for example, could encourage the abilities of a new generation while instilling an affection for, and thus a better knowledge of, Pakistan’s maritime gateway to the world.
2. ***Incorporate the humanities into maritime technical curricula.*** For reasons explained earlier, universities with maritime technical programs owe it to their students to include exposure to the humanities. Failure to do so means becoming a training school rather than a university. A true university education means more than acquiring mere knowledge. Science, technology and management graduates also need a grounding in analytical reasoning and the perspectives provided by subjects such as philosophy and

history. There should be no concern that education in comparative philosophy or religion is somehow un-Islamic. On the contrary, it has been argued that one of the reasons that some elements of the Islamic community have had difficulty reconciling their faith with modernity is that “the process of *ijtihad* was closed several centuries ago.”^[18] One of the more eloquent voices advocating the independent critical attitude represented by the *ijtihad* concept was Pakistan’s Muhammad Iqbal who said:

“The closing of the door of *Ijtihad* is pure fiction suggested partly by the crystallization of legal thought in Islam, and partly by the intellectual laziness which, especially in the period of spiritual decay, turns great thinkers into idols. If some of the later doctors have upheld this fiction, modern Islam is not bound by this voluntary surrender of intellectual independence.”^[19]

3. ***Introduce maritime dimensions to primary education.*** Pakistan is dedicated to achieving Millennium Development Goal #2 – to “achieve universal primary education” The maritime community could contribute to that vital aim, as well as advancing national awareness of the sea, by helping to develop primary educational materials with a maritime theme. Primary reading texts and colouring books about ships, fishing, exploration and marine life could not only contribute to literacy, but also contribute vivid lessons about subjects like history and science.
4. ***Make NCMPR a centre of excellence for maritime humanities.*** The museum of the United States Naval War College in Newport contains the desk of Alfred Thayer Mahan, the 19th Century naval thinker whose seminal book, *The Influence of Sea Power Upon History*, had so much influence upon the politics of 20th Century that still affect us today. Perhaps in the future, Bahria University will display possessions of some yet-unborn Pakistan academic and historian whose intellectual work will also influence history. That will depend on nurturing an environment of free, open and non-political research and debate based on solid scholarship in such fields as history, political philosophy and cultural psychology, to name a few. It also means partnerships. Pakistan is a bridge between East Asia and the Middle East, Central Asia’s link to the sea, as well as having strong ties with both Europe and North America. Its scholarly institutions can only benefit from intellectual partnership with its neighbours, especially the largest and most powerful – India.
5. ***Create opportunities for national maritime cultural celebrations.*** The year 2011 will mark the 1300th anniversary of the arrival of Islam in what is now Pakistan. If that event is going to be celebrated, then now is the time to start ensuring that the verbal and visual messages include that Muhammad Bin Qasim and his faith came to Pakistan *by sea*. It could be a powerful symbol for advancing maritime awareness and public policy. Just as China is now using the 15th Century Indian Ocean voyages of Zheng He’s treasure fleets to symbolize its heritage of maritime power projection, so Pakistan has this potential symbol to show the sea as a source of intellectual and material benefit.

CONCLUSION

China’s Mao Zedong once claimed that “power grows from the barrel of a gun”. This might have been arguable in more primitive times perhaps, but in this network-centric Information Age, power grows from information, knowledge and wisdom. Pakistan has an enormous intellectual capacity and heritage. One key to intellectual excellence is an educational policy that includes

the humanities as a core element of a well-rounded education, even in such utilitarian programs as science, engineering or management. That includes maritime educational programs. The maritime community can also contribute to national awareness of maritime affairs, as well as to the goal of universal literacy and a sound primary education. It is an exciting challenge and opportunity. In December 1940, before Pakistan even came into existence, Quaid-e-Azam Muhammad Ali Jinnah expressed this vision: "The prosperity and advancement of a nation depend upon its intelligentsia, and Muslim India is looking forward to her young generation and education classes to give a bold lead for our guidance and a brilliant record of historical achievements and traditions." Inshallah, that dream will be fulfilled.

Notes

1. Oxford English and Oxford Canadian Dictionaries.
2. General Charles C. Krulak, quoted in Fred Peck, "Zulu: As Good as it Gets", in *US Naval Institute Proceedings* November 2007, p. 60.
3. Maria Teresa Russo, "The Newcomers: Humanities in Engineering Education", paper presented to the *2007 International Conference on Engineering Education (ICEE-2007)*, Coimbra, Portugal, September 3-7, 2007, p. 3. Available online: <http://icee2007.dei.uc.pt/proceedings/papers/144.pdf>
4. Quoted in Russo, p. 2
5. Livio Matteo, "Arts Education Does Pay Off: Support for Sciences Ignores the Benefits of Broader Education", *Financial Post*, Monday, May 31, 1999. Posted online by Simon Fraser University Faculty of Arts and Social Sciences: www.sfu.ca/arts/articles/doespay.htm
6. J. Ben O'Neill Jr., "The Humanities and Their Effect On Engineering Education", *IEEE Communications Magazine*, December 1990, pp. 30-35. p. 32
7. Matteo, p. 1.
8. Torben Drewes, "Viewpoint – Value Added: Humanities and Social Science Degrees: Evidence supports long-term employment success", *Ontario Confederation of University Faculty Associations Forum*, Spring, 2002, pp. 10-12. Page 12
9. Russo, p. 1.
10. O'Neil, p. 32.
11. David Smock, *Workshop on Ijtihad: Reinterpreting Islamic Principles for the Twenty-First Century*, United States Institute of Peace and Center for the Study of Islam and Democracy, March 19, 2004, Special Report 125, August, 2004, p.7. Available online: www.usip.org/pubs/specialreports/sr125.pdf
12. Shanghai Jiao Tong University, <http://ed.sjtu.edu.cn/en/>
13. Pervez Amirali Hoodboy, "Science and the Islamic world – The quest for rapprochement", *Physics Today*, August, 2007, pp. 49-55. Page 52
14. Muhammad Iqbal, *The Reconstruction of Religious Thought in Islam*, originally published in 1930 with an additional chapter added in the 1934 edition. Reprinted in Lahore: Sang-i Mil Publications, 2004). Preface. Available online (without page numbers): www.openlibrary.ws/authors/allama-iqbal/reconstruction-of-religious-thought-in-islam/6/
15. "Pakistan's literacy rate nearly 54%" Pakistan Times Staff Report, 17 July 2004, online at <http://pakistanimes.net/2004/07/15/national4.htm>. Also Ministry of Education at www.moe.gov.pk/faqs.htm?#q4 and UNESCO at www.unesco.org/education/wef/en-news/pakistan.shtm
16. United Nations, Millennium Development Goals, www.un.org/millenniumgoals/index.html#
17. Ingrid Mattson, Professor of Islamic Studies and Director of Muslim Chaplaincy at Hartford Seminary, USA, quoted in Smock, p. 7.
18. Smock, p. 8.
19. Iqbal, Chapter 6.