

Georgia State University

ScholarWorks @ Georgia State University

International Business Faculty Publications

Institute of International Business

2009

Teaching Entrepreneurship: The Role of Liberal Arts Institutions

Mourad Dakhli

Georgia State University, mdakhli@gsu.edu

Follow this and additional works at: https://scholarworks.gsu.edu/intlbus_facpub



Part of the [International Business Commons](#)

Recommended Citation

Dakhli, M. (2009) Teaching Entrepreneurship: The Role of Liberal Arts Institutions. AUK Occasional Papers: Liberal Arts & Business Series, 83-93. American University of Kuwait.

This Article is brought to you for free and open access by the Institute of International Business at ScholarWorks @ Georgia State University. It has been accepted for inclusion in International Business Faculty Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

Teaching Entrepreneurship: The Role of Liberal Arts Institutions

Mourad Dakhli

ABSTRACT

Entrepreneurship has been recognized as one of the most effective engines for sustainable economic growth and development. To be an entrepreneur requires certain individual attributes that go beyond mastering the managerial and financial tools necessary for running a business. Unfortunately, whether as a stand-alone course or as a complete program of study, entrepreneurship has in general been placed under the management or business programs at many leading educational institutions in the U.S. and other countries. Furthermore, the structure and content of entrepreneurship programs have in general been transposed into other regions including the MENA countries without any significant adaptation to the local socio-cultural and economic environment.

In this paper, it is argued that liberal arts institutions are uniquely positioned to develop and implement a holistic, multifunctional approach in teaching entrepreneurship, and in developing and implementing context-specific entrepreneurship programs that build on student motivation, community engagement, as well as local and global institutional networks.

We survey the structure of entrepreneurship programs in a number of U.S. and Middle Eastern countries, and propose ways in which liberal arts institutions in the region can leverage their unique mission and roles in developing human capital for the purpose of furthering entrepreneurship education and subsequently entrepreneurship-driven socio-economic development.

INTRODUCTION

Teaching entrepreneurship has been gaining a great deal of attention in many colleges and universities. This growing importance is to a large part driven by the fact that entrepreneurship has been recognized as one of the major drivers for innovation and economic development (Dakhli and DeClercq, 2004; Leff, 1979). As a topic of study, entrepreneurship education is traditionally offered as a stand-alone course(s), or quite often as one of the concentration in undergraduate or graduate education along with the other business functional areas (Edelman, Manolova, & Brush, 2008).

In this paper, I argue that entrepreneurship education requires a radically more holistic and innovative approach. More than any other area of study, entrepreneurship requires the development of a set of skills, a unique mindset, and a strong grounding in the local institutional context. This argument mirrors the fact that entrepreneurship itself has been shown to be embedded in the local institutional setting, and its development and affect on the socio-economic environment is subject to the macro-level factors associated with the context (Baker, Gedajlovic, & Lubatkin, 2005; Shane, 1992; Danis, DeClerq, & Dakhli, 2007). This, in addition to the fact that entrepreneurship is truly a multidisciplinary subject (Navarro, 2008), liberal arts institutions are uniquely positioned to lead the way in developing a more balanced approach to developing entrepreneurial spirit, initiative, and activities within the appropriate parameters of the institutional context.

This paper is organized as follows. First, a brief survey of the institutional profile for entrepreneurship is provided. I build on the work of Scott (2002) and Busenitz, Gomez and Spencer (2000) to outline the institutional variables that affect entrepreneurship. Second, I survey entrepreneurship education at leading educational institutions in the Middle East and North Africa region (MENA) and compare the trends with those found at top North American institutions. Finally, I propose ways in which best practices in entrepreneurship education can be transferred and adapted to the local institutional and cultural context of the MENA region.

LITERATURE REVIEW

A country's institutional environment is comprised of rules, cognitive structures, and social norms that guide and constrain human interaction (North, 1990; Scott, 2001). There has been extensive work on institutional theory that dates back to the late Nineteenth Century (see Scott (2001) for a full review of the development of institutional thought). Based on this body of work, Kostova and Roth (2002) introduced the concept of a country's institutional profile, defined as the 'issue-specific set of regulatory, cognitive, and normative institutions,' which provide a framework for human interaction in a given country.

Subsequent work in the area has specifically addressed the concept of institutional profile in the area of entrepreneurship (Busenitz, Gomez and Spencer, 2000).

I provide a survey of key entrepreneurship programs and use the country institutional profile concept to explore the degree to which transfer of practices in the area of entrepreneurship education should be adapted. First, the regulatory component of a country's institutional profile comprises the laws, regulations and government policies that might favor, or disfavor, entrepreneurial activity. This includes property rights laws, financing laws, and regulations applicable for starting a new business venture (Baumol, 1990; Claessens and Laeven, 2003). Government policies are an important dimension of the regulatory profile as it directly affects the level of available support for entrepreneurial ventures and impact their ability to acquire resources (Spencer and Gomez, 2004). Conversely, uncertain or inconsistent government policies toward the private sector may prevent entrepreneurs from crafting long-term strategies (Tan, 1996). The regulatory profile represents the entirety of the set of laws and regulations that define the rule of the game for both public and private enterprise. Significant differences exist among countries along these dimensions (Kostova and Roth, 2002). The institutional profile develops over a long period of time and is the result of a wide array of social, cultural, historical and other factors (Scott, 2001).

The regulatory dimension of the institutional profile is an important factor for entrepreneurship, and as such an important factor for entrepreneurship education. It is thus normal to expect the nature of entrepreneurship education to vary according to the factors that affect the regulatory dimension. Political system, transparency, activism, governance and the like would be expected to significantly affect how entrepreneurs acquire resources and put them to use (DeClerq and Dakhli, 2008).

Second, the cognitive component of a country's institutional profile reflects widely shared social knowledge and cognitive categories used by people to interpret a particular phenomenon, and are especially relevant to the context of education (Kostova and Roth, 2002). In the specific context of entrepreneurship education, this dimension comprises knowledge and skills about how to establish and operate new businesses (Busenitz, Gomez and Spencer, 2000). In some countries, especially in the United States, knowledge about how to establish a new firm might be well developed and widely dispersed (Spencer and Gomez, 2004). This is often the case in developed market economies, which tend to share relatively stable political and economic systems that have fostered and promoted private sector development and entrepreneurial skill-acquisition over decades or centuries (Hoskisson, Eden, Lau, & Wright, 2000). In contrast, across many countries, there may be more variation with respect to how knowledge about entrepreneurship is made available and processed. For instance, countries in the MENA region have in general large public sectors with significant government intervention in the economy. Private sector entrepreneurial activity is not actively encouraged, and the public sector tends to drain the economy out of a large portion of the local human capital (Barber, Mourshed, & Whelan, 2007). Furthermore, countries may also differ with respect to their cognitive institutional profile based on the availability of reliable market information, small business development programs, and financial infrastructure targeted at entrepreneurs (Spencer and Gomez, 2004). These differences, in turn, call for adapted approaches to entrepreneurship education where cognitive profiles differ. One would expect the structure and content of entrepreneurship programs to reflect the level of cognitive development in a given country, and to support a context-specific cognitive development.

Finally, the normative component of a country's institutional profile reflects the 'values, beliefs, norms and assumptions about human behavior held by the individuals in a given country' (Kostova and Roth, 2002), and emphasizes social obligation as the basis for shaping and constraining human interaction (Scott, 2001). The normative dimension is in fact a slightly different conceptualization of the value-based definitions of culture. Similar to cultural norms and values, normative prescriptions impose constraints on social behavior while at the same time empowering and enabling social action. In the context of entrepreneurship and entrepreneurship education, the normative dimension of a country's institutional profile pertains to the extent to which societal values, beliefs, and norms are supportive of entrepreneurs and creative, innovative behaviors in a business context (Busenitz, et al., 2000). In many advanced market economies, people tend to view entrepreneurs in positive terms, in that entrepreneurs are often perceived as innovators whose activities provide the 'indispensable driving force' that empowers capitalist economic growth (Livesay, 1982). In contrast, in many MENA region countries, and especially those of the GCC, starting a new venture is often not seen as the "best" alternative, and secure, high-paying government employment tends to be the choice for many young university graduates (Barber, Mourshed, & Whelan, 2007).

In summary, the concept of institutional profile provides a solid framework through which country-level differences can be illustrated. Previous work on the regulatory, cognitive, and normative dimensions of a country's institutional profile, and their application to the area of entrepreneurship provide insight into the applicability of these construct to entrepreneurship education across different countries and regions. A review of leading entrepreneurship programs shows that the United

States remains the leader in the area. Consequently, the American model of entrepreneurship education has been the main sources for program development across the world. I focus on the MENA region, and use differences in the institutional profiles between the United States and MENA area to suggest ways to adapt and improve entrepreneurship education in MENA higher education institutions.

METHODOLOGY AND DISCUSSION

In order to gain a better understanding of the state of teaching entrepreneurship in the MENA region, we survey the structure and content of entrepreneurship programs at leading educational institutions in the U.S. and the MENA region. The main objective is to complete a survey of entrepreneurship education practices and to develop guidelines for transfer of best practices to the MENA region. Our list is partially-compiled from the annual (Business Week, 2006) ranking of higher education institutions in the United States.

We survey the following three groups. These are 1. the leading ten universities in the United States, 2. the top ten liberal arts institutions in the United States, and 3. the most prominent English-language universities in the region (Appendix 1). Our choice of these three groups is based on the following. First, we believe that educational institutions in the United States have led the way in the area of entrepreneurship programs and education. The U.S. itself is recognized as a leading economy with high levels of entrepreneurial initiatives and activity (Shane, 1992). We also survey leading English-language universities in the MENA region to identify best practices and also weaknesses in the area of entrepreneurship education. More importantly, our choice to survey a number of liberal arts institutions is driven by the need to assess what role entrepreneurship education plays within such institutions, and if education and entrepreneurship programs here are different from other main stream institutions. In addition, a number of educational researchers have outlined the shortcomings of adopting purely functional methods to business education and have called for a more holistic approach (Navarro, 2008). Liberal arts institutions with their balanced curriculum, and focus on both cognitive and affective dimension of learning, can be better positioned to offer a more innovative, comprehensive, and context-relevant entrepreneurship programs.

As Appendix 1 shows, there is a great variance in the way entrepreneurship is included in the curriculum. This ranges from a complete absence of the subject to highly-developed undergraduate and graduate programs that include extensive course offering, strong academic-business partnerships, and solid practical and theoretical research streams.

The focus of current entrepreneurship programs can also be assessed by surveying the entrepreneurship textbooks that are most commonly used (Appendix 2). Edelman, Manolova and Brish (2008) provide an appraisal of the main entrepreneurship textbooks used around the world. A few conclusions can be made based on Appendix 2. First, the leading textbooks are American authored and published reflecting the role American universities play in the area of entrepreneurship education. New venture creation processes and start-up activities tend to be the focus of most books. The individual is generally the focus of these books. This reflects to a large degree the individual-level focus of most business programs in the United States. This fact is related to the high level of individualism in the American society (Hofstede, 1991). There is also an emphasis on the practical aspects of new venture establishment and growth. This pragmatic and direct approach is also a reflection of the low context nature of American culture.

Needless to say, knowledge generation and trend-setting in the area of entrepreneurship education has been and is still to a large extent dominated by the American approach to the subject. The nature of entrepreneurship education, including textbooks used to teach the subject is a reflection of the values and norms that characterize the American society (Hofstede, 1991; Triandis, 2005).

RECOMMENDATIONS FOR TRANSFER OF BEST PRACTICES IN ENTREPRENEURSHIP EDUCATION

There is no question that innovative and successful templates can be found in assessing the American model in developing and implementing entrepreneurship programs at higher education institutions. One of these should be based on adopting a more holistic, liberal arts approach in recognition of the many political, socio-cultural, and historical factors that underlie entrepreneurship, and in turn, should underlie entrepreneurship education.

There is also a true need of knowledge generation in the area of entrepreneurship education and research. While this issue is not limited to the area of entrepreneurship, it is unfortunately noted that no textbook exist that focus on venture creation

in the MENA region (World Bank MENA Development Report, 2008). The regulatory, cognitive and normative aspects associated with entrepreneurship are associated with the American model. Consequently, the transferability and relevance of such models may be limited.

CONCLUSION AND IMPLICATIONS

In their study about entrepreneurship education, Edelman et al. (2008) found a lack of correspondence between education and practice. Nonetheless, these authors argue that textbooks are typically used as guides, and that good instructors often augment books with their own experiences and examples. I believe that this point can be further developed for the context of this paper. I argue that while most of the research and instructional material on entrepreneurship are developed in the United States, qualified faculty need to play an active role in adapting the material to the local contexts through conscience and continuous use of context-relevant material and supplements. These can be in the form of examples, articles, case studies, guest speakers, field trip, and the like in order to adapt the U.S.-centric knowledge to the MENA institutional profile. This is especially critical with respect to the regulatory dimension of the institutional profile. The laws and regulations that sanction new venture creation, and business in general, in the MENA region are significantly different from those in the U.S. As such, developing models of entrepreneurship education that take into account the local regulatory context can be more effective as drivers for greater entrepreneurial undertaking.

The critical role of local “role models” is something that needs to be recognized. Role models provide guidance, and act as examples for others to follow. The normative dimension of entrepreneurship education can substantially be addressed by strengthening the positive views, perceptions, and attitudes associated with entrepreneurship. Universities can build partnerships with leading individuals and associations that can provide context-specific standards for reference with regards to entrepreneurship. Creative programs for associating undergraduate and graduate students of entrepreneurship with successful and respected entrepreneurs can go a long way in raising the status of entrepreneurship as a field of study and a career option.

I have presented the MENA area as a uniform region and discussed the countries as a single group. However, it is important to recognize the intra-regional differences with regards to institutional profiles of the countries included. In fact, there are important economic and regulatory differences as shown in the 2002 Economic Freedom Index and the 2006 Corruption Perception Index (Appendix 3). There are also significant differences in educational attainment among MENA countries as shown by the differences in the scores of the various countries on standardized test results (Appendix 4). Nonetheless, the region shares a common language, heritage, and culture. More importantly, the region shares many of the shortcomings associated with educational systems as described in the World Bank’s 2008 MENA Development Report that offered a critical view of the state of education in the MENA region.

REFERENCES

- Baker, T., Gedajlovic, E. and Lubatkin, M. (2005) ‘A framework for comparing entrepreneurship processes across nations’. *Journal of International Business Studies*, 36(5): 492-504.
- Barber, M., Mourshed, M., Whelan, F. (2007). Improving education in the Gulf: Educational reform should focus on outcomes, not inputs. *The McKinsey Quarterly*.
- Baumol, W.J. (1990) ‘Entrepreneurship: Productive, unproductive, and destructive’. *The Journal of Political Economy*, 98(5): 893.
- Busenitz, L.W., Gomez, C. and Spencer, J.W. (2000) ‘Country institutional profiles: Unlocking entrepreneurial phenomena’. *Academy of Management Journal*, 43(5): 994-1003.
- Claessens, S. and Laeven, L. (2003) ‘Financial development, property rights, and growth’. *The Journal of Finance*, 58(6): 2401-36.
- Danis, W., De Clercq, D. & Dakhli, M. (2007). The Co-Evolution of Institutions, Social Networks And Entrepreneurial Activity In Emerging Economies: A Multi-Country Study. *Academy of International Business Proceedings*.
- Dakhli, M. and De Clercq, D. (2004) ‘Human capital, social capital, and innovation: A multi-country study’. *Entrepreneurship & Regional Development*, 16(2): 107-28.

- De Clerq, D. and Dakhli, M. (2008). Personal Strain and Ethical Standards of the Self-Employed. *Journal of Business Venturing* (Forthcoming).
- Edelman, L., Manolova, T. & Brush, C. (2008). Entrepreneurship Education: Correspondence Between Practices of Nascent Entrepreneurs and Textbook Prescriptions for Success. *Academy of Management Learning & Education*, 7(1), 56–70.
- Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind*. Berkshire, England: McGraw-Hill.
- Hoskisson, R., E. Eden, L., Lau, C.M. and Wright, M. (2000) 'Strategy in emerging economies'. *Academy of Management Journal*, 43(3): 249-67.
- Kostova, T. and Roth, K. (2002) 'Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects'. *Academy of Management Journal*, 45(1): 215-33.
- Leff, N., H., 1979. Entrepreneurship and Economic Development: A problem Revisited. *Journal of Economic Literature*, 17(1): 46-64.
- Livesay, H.C. (1982) 'Entrepreneurial history'. In Kent, C.A., D.L. Sexton, & K.H. Vesper, editors, *Encyclopedia of entrepreneurship*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Navarro, P. (2008). The MBA Core Curricula of Top-Ranked U.S. Business Schools: A Study in Failure? *Academy of Management Learning & Education*, 2008, Vol. 7, No. 1, 108–123.
- Shane, S.A. (1992) 'Why do some societies invent more than others?' *Journal of Business Venturing*, 7(1): 29-46.
- Spencer, J.W. and Gomez, C. (2004) 'The relationship among national institutional structures, economic factors, and domestic entrepreneurial activity: A multicountry study'. *Journal of Business Research*, 57(10): 1098-107.
- Tan, J. (1996) 'Regulatory environment and strategic orientations in a transitional economy: A study of Chinese private enterprise'. *Entrepreneurship Theory and Practice*, 21(1): 31-46.
- Transparency International (2006). The 2006 Transparency International Corruption Perceptions Index: <http://www.infoplease.com/ipa/A0781359.html>
- Triandis, H. C. (1995). *Individualism and Collectivism*. Boulder, CO: Westview.
- World Bank 2008. *The Road Not Traveled: Education Reform in the Middle East and Africa*. MENA Development Report.

Appendix 1. Survey of Entrepreneurship Programs at selected American and Regional Higher Education Institutions.

| Top 10 Universities | Graduate Programs | Undergraduate Programs | Notes & Remarks |
|---|---|---|--|
| Entrepreneurship (USA) | | | |
| 1) Babson College | <p>“Entrepreneurship as the epicenter of the school’s pedagogy with the adoption of a holistic and integrated core curriculum for full-time students. The program traces the new venture creation cycle and introduces traditional business principles within the context of entrepreneurial thought.”.... Entrepreneurship Intensity Track (ETI) was developed in 2000. This is a customized elective curriculum which is designed for students committed to starting a high-potential venture while completing their MBA.</p> | <p>Second year undergrad students have the option of enrolling in an “Accelerated Curriculum for Entrepreneurship” a yearlong program that addresses the fundamentals of entrepreneurship. The course titles and descriptions are outlined at http://www3.babson.edu/ESHIP/academic/undergrad/ugcoursedescriptions.cfm</p> | <p>This is the leading American Institution in the area of Entrepreneurship Education and Research. The Annual Babson Entrepreneurship Conference is the leading forum where advances in Entrepreneurship programs and research are presented.</p> |
| 2) Stanford University | <p>Practical, technically focused http://spric.stanford.edu/ http://www.gsb.stanford.edu/exed/epse/</p> | <p>No undergraduate program in Entrepreneurship, but specific courses are offered.</p> | |
| 3) University of Pennsylvania | <p>The school offers an “Entrepreneurial Management” major that is presented as a program that provides MBA students with the analytical tools and experiences to prepare them for careers that leverage their “entrepreneurial mindset,” http://www.wharton.upenn.edu/whartonfacts/entrepreneurship/</p> | <p>Entrepreneurship is offered as second concentration under the label: “Entrepreneurship and Innovation.” The concentration is focused on new venture in technology intensive industries.</p> | <p>A strong program, using multiple perspectives to develop the ‘entrepreneurship mindset.’</p> |
| 4) Harvard University | <p>“Incubator of ideas” Must take course for all MBA students: The Entrepreneurial Manager This course addresses the issues faced by managers who wish to turn opportunity into viable organizations that create value, and empowers students to develop their own approaches, guidelines, and skills for being entrepreneurial managers.</p> | <p>No undergraduate program in Entrepreneurship.</p> | |
| 5) MIT | <p>Two programs that concern entrepreneurship: Entrepreneurship and Innovation and Global Entrepreneurship. Both focus greatly on the technology aspect of the discipline. http://www.hbs.edu/entrepreneurship/</p> | <p>Separate courses covering different area of entrepreneurship are offered</p> | |
| 6) University of Southern California | <p>Entrepreneurship concentration is offered</p> | <p>Linking entrepreneurship undergrad students with mentors and is what makes USC standout from the others. http://marshall.usc.edu/greif/</p> | |

| | | | |
|---------------------------------------|--|---|--|
| 7) Northwestern University | Offers a Technical Entrepreneurship program which is focused on the opportunities and challenges associated with starting a technology venture. The school site states that “The single greatest wealth creator of our generation and of every generation before us has been technology.” http://www.cei.northwestern.edu/curriculum/ | “IEMS 325 Engineering Entrepreneurship. The goal of the course is to provide you with an understanding of the environment of the entrepreneur. At the same time we will look at the concept of intrapreneuring (the entrepreneur inside the corporation). | Technology-focused & New-business start-up directed. |
| 8) University of Michigan | No graduate program in Entrepreneurship | “The College of Engineering has built an entrepreneurship curriculum that integrates education in technology, business, government and culture.” http://cfe.engin.umich.edu/academics | Technology-focused. |
| 9) University of Texas | Entrepreneurship is classified as an interdisciplinary program http://mba.mcombs.utexas.edu/students/academics/special/specmgent.asp | | One of the few interdisciplinary programs in Entrepreneurship. |
| 10) University of California-Berkeley | http://mba.haas.berkeley.edu/specialties_02.html . Their entrepreneurship center attempts to merge all disciplines. | | |
| Liberal Arts (U.S.A.) | | | |
| 1) Williams College | Non-Academic: http://www.williams.edu/resources/commservice/index.php?id=3 | | |
| 2) Amherst College | | | |
| 3) Swarthmore College | For Alumni, Non-Academic http://www.swarthmore.edu/lax/index.php | | |
| 4) Wellesley College | | | |
| 5) Middlebury College | | | |
| 6) Carleton College | Non-Academic, program with businesses. http://apps.carleton.edu/news/features/?story_id=131048 | | |
| 7) Bowdoin College | | | |
| 8) Pomona College | | | |
| 9) Haverford College | http://cdoapps.haverford.edu/resources/blog/ | | |
| 10) Davidson College | | | |
| MENA Region | | | |
| 1) American University - Sharjah | The school offers a set of Entrepreneurship courses within the MBA program http://www.aus.edu/search/results.php?q=Entrepreneurship&cx=004386407101174383583%3Aagxov3axdgg&cof=FORID%3A11&sa=Search#998 | | |

| | | | |
|--|--|---|--|
| 2) American University of Beirut | <p>Concentrations in the MM&E (Management, Marketing and Entrepreneurship) Track: Management and Marketing directed at entrepreneurship</p> <p>The track offers two concentrations: (1) General Management and (2) Marketing. http://sb-lb.aub.edu.lb/student/concentrations-bba.asp</p> | | |
| 3) American University of Cairo | | | |
| 4) American Lebanese University | | | |
| 5) Kuwait University | | | |
| 6) Zayed University | <p>The university offers an MS degree in innovation and entrepreneurship. http://www.zu.ac.ae/msie</p> | | |
| 7) Lebanese American University | <p>http://www.lau.edu.lb/centers-institutes/ifeb/about.html</p> <p>The Institute's vision is to be a valuable resource center and the leader in the family business activities in Lebanon and the Middle East</p> | | |
| 8) University of Qatar | | | |
| 9) American University of Kuwait (AUK) | No graduate programs | Limited Entrepreneurship courses offered to Undergraduate business majors | |

Appendix 2. Main Textbooks Used in Teaching Entrepreneurship

Entrepreneurship Textbooks and Textbook Objectives

| Textbook | Author | Publisher | Textbook Objectives |
|---|---|-------------------------------|--|
| <i>Growing & Managing an Entrepreneurial Business</i> , 1999 ^a | Allen, K. R. | Houghton Mifflin and Company | The key issues in this book revolve around the customer, the product/service, the process, the organization and leadership (p. xx). |
| <i>Launching New Ventures: An Entrepreneurial Approach</i> , 3rd, 2003 ^b | Allen, K. R. | Houghton Mifflin and Company | <i>Launching New Ventures</i> is organized around the process of creating new ventures, from recognition of an opportunity to launch of the business (p. xv). |
| <i>Entrepreneurship: A Process Perspective</i> , 2005 ^a | Baron, R. A., & Shane, S. A. | Thompson: South-Western | Our guiding principle when writing this book is that entrepreneurship is a process which unfolds through several distinct phases (p. ix). |
| <i>The Guru Guide to Entrepreneurship</i> , 2001 | Boyett, J. H., & Boyett, J. T. | John Wiley and Sons | <i>The Guru Guide to Entrepreneurship</i> is a clear, concise, and informative guide to the wisdom of some of the world's most successful entrepreneurs (p. ix). |
| <i>The Portable MBA in Entrepreneurship</i> , 3rd 2004 | Bygrave, W. D., & Zacharakis, A. (Eds.) | John Wiley and Sons | The book is for would-be entrepreneurs, people who have started small firms and others who want to improve their entrepreneurial skills—indeed anyone who wants to get involved in the birth and growth of an enterprise (p. viii). |
| <i>Entrepreneurship In Action</i> , 2nd, 2003 | Coulter, M. | Prentice Hall | <i>Entrepreneurship is Action!</i> conveys the exciting realities of entrepreneurship (p. xvii). |
| <i>Entrepreneurship: Strategies & Resources</i> , 3rd, 2003 ^a | Dollinger, M. J. | Prentice Hall | <i>Entrepreneurship: Strategies & Resources</i> is organized into three major areas: theories and themes; the environment for entrepreneurship, and the formulation and implementation of entrepreneurial strategy (pp. xix-xxi). |
| <i>How To Really Start Your Own Business</i> , 2003 | Gumpert, D. E. | Lauson Publishing Co. | <i>How to Really Start Your Own Business</i> provides extensive worksheets and lessons so readers can evaluate their own business ideas and plans (p. ix). |
| <i>Entrepreneurship</i> , 6th, 2005 | Hisrich, R. D., Peters, M. P., & Shepherd, D. A. | McGraw-Hill: Irwin | To provide an understanding of the person and process of creating and growing a new venture (p. xix). |
| <i>Entrepreneurship: Theory, Process and Practice</i> , 6th, 2004 ^a | Kuratko, D. F., & Hodgetts, R. M. | Thompson: Southwestern | To structure and illustrate the discipline of entrepreneurship in a manner that is as unique and creative an entrepreneurship itself (p. xiii). |
| <i>Entrepreneurial Intensity: Sustainable Advantages for Individuals, Organizations, and Societies</i> , 1998 | Morris, M. H. | Quorum Books | Entrepreneurship occurs in varying degrees and amounts and environments can be created in ways that heighten entrepreneurial intensity at all three levels (p. xvii). |
| <i>The Entrepreneurial Venture</i> , 2nd, 1999 | Sahlman, W. A., Stevenson, H. H., Roberts, M. J., & Bhide, A. V. (Eds.) | Harvard Business School Press | The readings assembled here attempt to cover the spectrum of the entrepreneurial experience, from idea generation to harvest (p. 3). |
| <i>Essentials of Entrepreneurship: What It Takes to Create Successful Enterprises</i> , 2003 | TiE: The Indus Entrepreneurs | John Wiley and Sons | The book starts with a perspective on entrepreneurship discussing the attributes of a region or a nation, which foster the spirit of risk taking and economic value creation, and the characteristics of successful entrepreneurs (p. ix). |
| <i>New Venture Creation: Entrepreneurship for the 21st Century</i> , 6th, 2004 ^b | Timmons, J. A., & Spinelli, S. S. | McGraw-Hill: Irwin | <i>New Venture Creation</i> is about the actual process of getting a new venture started, growing the venture, successfully harvesting it (p. xi). |

^a These texts were mentioned at least 3 times in our on-line survey.^b These texts were mentioned 4 or more times in our on-line survey.

Appendix 3. Economic Freedom Index for Selected Countries in the MENA Region (The United States and other countries are included for reference purposes)

| COUNTRIES | SUMMARY INDEX | RANK |
|----------------------|----------------------|-------------|
| Hong Kong | 8.7 | 1 |
| Singapore | 8.6 | 2 |
| United States | 8.2 | 3 |
| United Arab Emirates | 7.5 | 16 |
| Kuwait | 7.4 | 18 |
| Oman | 7.4 | 18 |
| Bahrain | 7.1 | 31 |
| Jordan | 7.0 | 36 |
| Tunisia | 6.3 | 68 |
| Egypt | 6.2 | 74 |
| Morocco | 5.9 | 83 |
| Syria | 5.4 | 103 |
| Algeria | 4.6 | 118 |

The 2006 Transparency International Corruption Perceptions Index for MENA Region Countries

| COUNTRY RANK | COUNTRY | 2006 CPI SCORE |
|---------------------|----------------------|-----------------------|
| 1 | Finland | 9.6 |
| 20 | USA | 7.3 |
| 31 | United Arab Emirates | 6.2 |
| 32 | Qatar | 6.0 |
| 36 | Bahrain | 5.7 |
| 39 | Oman | 5.4 |
| 40 | Jordan | 5.3 |
| 46 | Kuwait | 4.8 |
| 51 | Tunisia | 4.6 |
| 63 | Lebanon | 3.6 |
| 70 | Egypt | 3.3 |
| 70 | Saudi Arabia | 3.3 |
| 79 | Morocco | 3.2 |
| 84 | Algeria | 3.1 |
| 93 | Syria | 2.9 |
| 105 | Libya | 2.7 |
| 111 | Yemen | 2.6 |
| 156 | Sudan | 2.0 |
| 160 | Iraq | 1.9 |

Appendix 4. Standardized Math and Science Achievement Scores for Selected Countries *

■ Participating Gulf Cooperation Council (GCC)¹ state

2003 TIMSS 8th-grade math achievement²

| Rank | Country | Mean score | Rank | Country | Mean score |
|------|-------------------|------------|-----------|------------------------------|------------|
| 1 | Singapore | 605 | 24 | Serbia | 477 |
| 2 | South Korea | 589 | 25 | Bulgaria | 475 |
| 3 | Hong Kong | 586 | 26 | Romania | 475 |
| 4 | Chinese Taipei | 565 | | International average | 467 |
| 5 | Japan | 570 | 27 | Norway | 461 |
| 6 | Belgium (Flemish) | 537 | 28 | Moldova | 460 |
| 7 | Netherlands | 536 | 29 | Cyprus | 459 |
| 8 | Estonia | 531 | 30 | Macedonia | 435 |
| 9 | Hungary | 529 | 31 | Lebanon | 433 |
| 10 | Malaysia | 508 | 32 | Jordan | 424 |
| 11 | Latvia | 508 | 33 | Iran | 411 |
| 12 | Russia | 508 | 34 | Indonesia | 411 |
| 13 | Slovakia | 508 | 35 | Tunisia | 410 |
| 14 | Australia | 505 | 36 | Egypt | 408 |
| 15 | United States | 504 | 37 | Bahrain | 401 |
| 16 | Lithuania | 502 | 38 | Palestine | 390 |
| 17 | Sweden | 499 | 39 | Chile | 387 |
| 18 | Scotland | 498 | 40 | Morocco | 387 |
| 19 | Israel | 496 | 41 | Philippines | 378 |
| 20 | New Zealand | 494 | 42 | Botswana | 366 |
| 21 | Slovenia | 493 | 43 | Saudi Arabia | 332 |
| 22 | Italy | 484 | 44 | Ghana | 275 |
| 23 | Armenia | 478 | 45 | South Africa | 254 |
| | | | | England ³ | 496 |

2003 TIMSS 8th-grade science achievement²

| Rank | Country | Mean score | Rank | Country | Mean score |
|------|-------------------|------------|-----------|------------------------------|------------|
| 1 | Singapore | 578 | 24 | Bulgaria | 479 |
| 2 | Chinese Taipei | 571 | 25 | Jordan | 475 |
| 2 | South Korea | 558 | | International average | 474 |
| 4 | Hong Kong | 556 | 25 | Moldova | 472 |
| 5 | Estonia | 552 | 27 | Romania | 470 |
| 6 | Japan | 552 | 28 | Serbia | 468 |
| 7 | Hungary | 543 | 29 | Armenia | 461 |
| 8 | Netherlands | 536 | 30 | Iran | 453 |
| 9 | United States | 527 | 31 | Macedonia | 449 |
| 10 | Australia | 527 | 32 | Cyprus | 441 |
| 11 | Sweden | 524 | 33 | Bahrain | 438 |
| 12 | Slovenia | 520 | 34 | Palestine | 435 |
| 13 | New Zealand | 520 | 35 | Egypt | 421 |
| 14 | Lithuania | 519 | 36 | Indonesia | 420 |
| 15 | Slovakia | 517 | 37 | Chile | 413 |
| 16 | Belgium (Flemish) | 516 | 38 | Tunisia | 404 |
| 17 | Russia | 514 | 39 | Saudi Arabia | 398 |
| 18 | Latvia | 512 | 40 | Morocco | 390 |
| 19 | Scotland | 512 | 41 | Lebanon | 393 |
| 20 | Malaysia | 510 | 42 | Philippines | 377 |
| 21 | Norway | 494 | 43 | Botswana | 365 |
| 22 | Italy | 491 | 44 | Ghana | 259 |
| 23 | Israel | 480 | 45 | South Africa | 244 |
| | | | | England ³ | 544 |

¹Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates.

²TIMSS = Trends in International Mathematics and Science Study, an international examination conducted every 4 years, most recently administered in 2003.

³Excluded from ranking because of sampling problems; England and Scotland participated separately in TIMSS in 2003.

Source: TIMSS

• Source: McKensey Quarterly, 2007