

Rethinking Professional Study Programs and Continuing Education in the Euro-Mediterranean Region: Action Agenda and Recommendations

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THE NEW COMPETITIVE and changing dynamics made knowledge resources the most strategic assets to create and sustain competitive advantage in today's business landscape. Businesses and public organizations alike need knowledge workers to streamline their processes, differentiate their product and service offerings, and generate value for their stakeholders. The discrepancy between the demand for such distinctive profiles and the current supply of human resources is causing higher education institutions to rethink their learning practices and the process whereby knowledge resources are developed, applied, and renewed. This article analyzes these dynamics and sheds more light on the changes that are affecting the learning processes with regards to professional study programs and continuing education, particularly in the Euro-Mediterranean region. The article draws up an action agenda to make such programs more valuable emphasizing the role of innovative pedagogical approaches, the importance of instructional design, the adding-value of information technologies, and the required structural and human resource changes at the level of universities' organizational design. Building on the participants' input gathered during the EMUNI'S 2013 HE&R Conference, the article suggests specific recommendations on how the Euro-Mediterranean universities can play a catalyst role in reshaping, leading, and implementing competitive and targeted professional study programs based on network-based structures and on mapping and leveraging different partners' distinctive capabilities and core competences.

Key Words: professional study programs; competence development; innovative learning approaches; instructional design; learning technologies

INTRODUCTION: LEARNING
AS A PERFORMANCE DRIVER

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In a complex business environment characterized by increasing globalization and technological discontinuities, knowledge has become a fundamental asset and learning the core process to make effective decisions, lead change, generate innovations, and develop continuous competitive advantages. The virtuous cycle of knowledge production, innovation, and application has also contributed to shortening life-cycle of competences and skills in the workplace. In such an economic scenario, we are witnessing the emergence of a new professional profile, the knowledge worker who is viewed as a change agent able to leverage knowledge resources to foster innovation and boost productivity. Due to the growing innovation dynamics, knowledge becomes easily obsolete, and consequently the processes of upgrading existing knowledge bases and acquiring new knowledge are today considered as strategic competitive differentiators for knowledge workers and businesses alike.

A report published by Accenture (Brakeley and Meister 2005) demonstrates the relationship between learning processes and company performance as measured through productivity, revenue growth, and profit growth. From an individual perspective, knowledge workers are also investing in their learning and competence development through systematic training mechanisms including continuing education, professional studies, and summer schools, but also through informal development processes based on interactions in teams, on-the-job learning, and trial and error. In this context, career management and planning is becoming the main responsibility of knowledge workers, which also explains the increasing employment mobility in the workplace. Lifelong learning has also emerged as a concept and practice to illustrate this continuous knowledge generation, upgrading, and re-development through different and diverse learning processes stemming also from job experiences.

Besides the increasing need for specific, adapted, and systematic educational processes in order to meet the increasing demand for qualified and skillful workforce, there is still a clear discrepancy between university curricula and job requirements. To reduce this gap and address this inadequacy between demand and supply of professional competences, large business organizations are tailoring their own



training programs and delivering them through corporate universities based on job-related needs assessment and talent management programs. On the other hand, educational institutions, universities, and technical schools in the Euro-Mediterranean region are rethinking the process, whereby knowledge is produced and competences are developed through different and innovative study programs that also enhance student employability. In particular, this is meant to meet the expectations of small businesses, provide the necessary competences to support their competitiveness, and enable access to cost effective knowledge generation and development opportunities.

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Attempts have been made to implement new learning strategies in academic institutions in line with Mode 2 of knowledge production, which is carried out in the context of application, trans-disciplinary, heterogeneous, *heterarchical* and transient, socially accountable and reflexive (Gibbons et al. 1994). Maintaining that the contemporary graduate and professional studies focus too much on the analytical decision making, Mintzberg, for instance, developed this critique by advocating pedagogical devices that improve the situational, collaborative, and global problem solving capabilities of the contemporary managers (Mintzberg and Gosling 2002).

In this paper, we introduce the major trends that are shaping higher education processes in general, we discuss the main challenges that training and academic institutions are facing in the Euro-Mediterranean region, and draw up an agenda to facilitate the design and the implementation of effective continuing education services and programs. Building on valuable input and meaningful insights collected during the workshop organized by the Euro-Mediterranean University (EMUNI) on 22 November 2013 in Brdo pri Kranju (Slovenia), we will suggest critical success factors and recommendations that have the potential to lay the foundations for a roadmap on how to develop and implement value-generating continuing education programs.

RETHINKING LEARNING PROCESSES
IN HIGHER EDUCATION

Learning is a process through which people acquire new knowledge, including skills and specific competences, from experience or by ob-

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serving others, and assimilate and organize this knowledge in relation to the prior knowledge in memory in order to make them retrievable for use in both routine and non-routine action (Anderson 1982; Holcomb et al. 2009). By learning people construct meaning through experience and create new reality in the context of social interaction (Weick 1995). Hence learning becomes the outcome of dynamic social processes of sense-making, which are not only cognitive or behavioral but also affective and holistic (Gibb 2001; Cope 2005). It is a dynamic process of awareness, reflection, association, and application that involves the transformation of experience and knowledge into functional learning outcomes (Rae 2006).

We can distinguish between experiential learning and vicarious learning. Experiential learning is described as the process whereby knowledge is created through the transformation of experience (Kolb 1984), whereas vicarious learning can be defined as observational learning involving modeling the behaviors and actions of others (Bandura 1977).

Entrepreneurial learning has recently emerged as a new practice to promote and reinforce entrepreneurship and leadership attitudes and behaviors through educational and pedagogical processes (Alvares et al. 2013; Remeikiene, Dumciuviene, and Startiene 2013). Scholars define entrepreneurial learning as a process through which people acquire, assimilate, and organize newly formed knowledge with pre-existing structures, and the way in which learning affects entrepreneurial and leadership action (e.g. Rae and Carswell 2001; Warren 2004; Cope 2005; Corbett 2005).

The increasing integration of entrepreneurial learning processes into the higher education curriculum, particularly in the Euro-Mediterranean region, stems from the growing importance given to both intrapreneurship and entrepreneurship as economic determinants of innovation and growth, as well as efficient mechanisms to encourage youth employment. Such entrepreneurial learning processes have been incorporated into the existing curricula or leveraged through new training programs including professional study programs and continuing education programs.

The examples include course content, which uses case material,



simulations (Hindle and Angehrn 1998), trial and error, divergent thinking (Sternberg and Lubart 1999), and various ‘hands-on’ approaches (Gorman, Hanlon, and King 1997; Vesper and McMullan 1988). Other approaches for instance include, Heinonen and Pikki-joki’s (2006) four-stage entrepreneurial process model connected with behaviors, skills, and attributes, which introduces an entrepreneurial-directed approach to education based on circles of experiential learning, with new activity producing both new experience and new thinking through reflection. This is an example of action learning approach, which is a structured and collaborative process of inquiry undertaken through questioning, acting, sharing experience, and reflection on problem-solving in practical situations (Rae 2009). Another learning strategy is PBL or Problem-Based Learning where learning is student-centered with teachers acting primarily in the role of facilitators (Hanke and Kisenwether 2005). Such strategy significantly increases self-efficacy and the ability to cope with uncertainty, both key characteristics of successful leaders and entrepreneurs. Similarly, business planning education has also been used in different academic settings based on the assumption that the students who have learned to plan should demonstrate increased mastery, knowledge, and comprehension that would assist them in the initiative taking process (Honig 2004).

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However, academic-led studies on the most relevant professional skills suggest that communication and writing skills remain relevant, while the provision of the analysis skills needs refocusing (Wong 1998; Ozawa and Seltzer 1999; Alexander 2001). The educational policy efforts aimed at stimulating leadership, innovation, and initiative taking should primarily focus on developing creativity, critical thinking, and reflection among individuals, which in turn can have a profound influence on both their motivation and their ability to develop valuable knowledge through their professional lives (Politis 2005).

Entrepreneurial learning is not fully accepted or adopted by universities and technical schools or even higher education as a whole, as their values of practical and emergent learning challenge the ‘bureaucratic control’ culture of academe, which still privileges programmed knowledge (Gibb 2002; Rae 2009).

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The universities in the Euro-Mediterranean region are faced with the question regarding the relevance of their study programs due to the changing skill base of the economy. Consequently, an increasing number of voices point out the irrelevance of the disciplinary basis of universities (Meira Soares and Amaral 1999). For example, the model of interdisciplinary education leading to a degree in business and law or political science and IT hardly exists (Pawlowski 2001).

More creative learning processes should be incorporated in higher education at both the organizational level (Clark 1998), as well as the program level (Volkman 2004), accordingly. Students need programs that support a range of ways that are often unplanned, emergent, short-term, and non-sequential (Gibb 2002; Atherton 2007). Hawkins (1998) has long advocated for planning education to incorporate basic management theory and skills. Pedagogical techniques should be developed that focus on the applied hands-on activities, resulting in experiential learning, as opposed to the teaching of general principles (Honig 2004). Just as graduates should be able to write an essay expressing their personal thoughts or a scientific paper providing evidence against hypotheses; they should also be able to write a project plan, setting forth an idea for a new social or business project and a test of its viability (Etzkowitz and Zhou 2008).

The universities and academe in the Euro-Mediterranean region have been criticized for their inability to provide such programs. Academics are prone to teach what they know, not what their students or stakeholders need (Miclea 2004). The expression 'stakeholders' is more and more used to denote the environment of a university. They include students, as well as graduates, people of the neighboring towns and villages, local and regional authorities, and the business sector (local and national) (Pawlowski 2001). In the current universities, students use learning 'pushed' at them in programmed or curricular structures, instead of engaging in a dynamic experience of developing their venture 'pulled' learning as they require in response to their questions and problems (Mumford 2006; Rae 2009). This process supports thinking 'inside the box,' whereby students are taught



an ideal method and are encouraged to conform to it (Honig 2004).

The whole university culture becomes questionable. Miclea (2004) describes this culture as being built on individual performance where students are evaluated through individual examinations. This practice is neither good nor bad; however, it is simply not favorable to the training and development of innovation skills.

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In the recent years, we have seen many universities taking specific actions to adapt to the new social and business needs. Barnett (1994) defined the changing situation as a shift 'from higher education in society to higher education of society.' Universities have developed technology transfer capabilities and extended their teaching from educating individuals to shaping organizations through innovative education (Etzkowitz and Zhou 2008).

Since industrial development will increasingly depend on knowledge, education is thus a major economic resource (Amaral 1991). In his recent statement Peter Drucker (2000) claims that education has become the main item of the Gross Domestic Product. In such a knowledge-based socio-economic regime, the societies in the Euro-Mediterranean region expect the universities to do much more for the communities in solving economic and social problems; however, governments are at the same time reducing their financial support and are becoming unreliable patrons (Kristensen 1999). A new actor, the 'market,' has replaced the public administration as the driving force behind the development of higher education, as well as the main employer of its training and research products (Neave and Van Vught 1994). This calls for the reinforcement of the global role of the universities – from basic science to innovation and production agents to fostering economic development and growth. Through imagination, ambition, leadership and cooperation of individuals from universities, industry, and government, all three institutional spheres can participate in the birth of hybrid training programs that meet market expectations, boost innovation, and effectively contribute to economic and societal change.

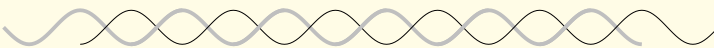
Such cooperation mechanisms should also be strengthened between countries sharing the same regional concerns and facing similar economic and developmental challenges, which is the case in the Euro-

[194] Mediterranean region. Professional study programs and continuing education programs represent an opportunity to experiment with such innovative educational approaches and promote Euro-Mediterranean cooperation between universities and other industrial and government stakeholders. The Euro-Mediterranean University (EMUNI), for instance, can offer a potential platform for such initiatives building on its network-based organization, knowledge diversity, and management flexibility.

AN ACTION AGENDA FOR PROFESSIONAL STUDY
PROGRAMS AND CONTINUING EDUCATION PROGRAMS
IN THE EURO-MEDITERRANEAN REGION

In order to play a strategic role in the current socio-economic landscape, the academic institutions in the Euro-Mediterranean region should promote and develop innovative, creative and high quality teaching in collaboration with industrial and government stakeholders and implement new pedagogical methods focused on mobilizing the resources and the potential of students for the learning process (Kristensen 1999). The educational institutions should also have the ability to integrate research-based learning, market-sensitive teaching and lifelong learning programs (Miclea 2004), professional, tailor-made and short courses (Cummings 1999), and project-based courses with inter-disciplinary groups and action-learning programs. Learning by discovery and teaching and learning by means of research processes must become the norm (Clark 1991) to ensure effective continuing education programs. From a structural perspective, in order to accommodate the needs of the new continuing education programs, the academic institutions can develop new units outside their existing departments to introduce new environmental relationships and new modes of thought and training that overcome the bureaucratic impediments of the current organizational designs.

While developing such study programs, the universities in the Euro-Mediterranean region should integrate the learner-centered approaches that strengthen the active nature of learners' involvement. Such approaches should also emphasize learning in action and competence development, instead of traditional classroom teaching based on



knowledge transfer (Elia and Poce 2010). In such a learning environment, students will be acting as knowledge workers to analyze trends and generate new ideas that they can then translate into lab projects through collaborative networks facilitated by mentors, tutors, and testimonials. Content should be designed, created, and shared for the purpose of developing project-oriented and context-specific competences, instead of being delivered as fragmented pieces of knowledge. Consequently, the team project thus becomes the major result and deliverable to evaluate training effectiveness. Content delivery should also emphasize both theory and practice as intertwined learning processes to support the development and generation of interdisciplinary and experiential knowledge.

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Technology can also facilitate such a learning strategy through an efficient and real-time access to multi-domain and diverse knowledge resources, and also through collaborative learning and interactive global spaces. Advanced e-Learning platforms offer such features and functionalities and can be integrated with face-to-face learning modalities (*blended learning*). However, efforts should be made to develop market-oriented and rich content, ensure efficient delivery and the attainment of intended learning objectives while using virtual spaces.

In a similar vein, the instructional design principles should be applied to develop the right content and decide on the accurate learning methods. While developing study and continuing education programs, a thorough needs assessment should be conducted to identify the initial knowledge of learners, understand the learning needs, and come up with specific intended learning objectives to keep the training process focused and to target particular competence levels. To prevent inclusive and all-encompassing training programs that meet the students' desires and wants, but not necessary their learning needs, clear design procedures should also be implemented based on the learners' readiness, their learning styles, and the transferability conditions of the learning outcomes. This can also help with some decision making processes, including for instance time and planning, location, and the selection of trainers. As per learning evaluation, this should not be limited merely to the learners' satisfaction, reaction, and the acquisition of learning material and content. Evaluation should particularly

focus on the behavioral change (e. g., creativity and innovativeness, risk taking, entrepreneurship, leadership etc.) and the results or tangible outcomes (e. g., projects, solutions etc.).

[196] With the proliferation of accreditation bodies and agencies, the Euro-Mediterranean universities and academic institutions should adhere to the accreditation processes having a global perspective and should not be merely limited to program content and delivery. The quality assurance standards should also emphasize the stakeholder's perspectives and cooperation with industry and government (e. g. advisory boards), market-oriented competence development, admission and administrative processes, faculty management, program sustainability, research and laboratories, learning infrastructure and technology, student mobility and exchange programs, and study abroad programs. All these represent the fundamental catalysts to maximize the benefits of a training experience. The universities should also ensure outside funding by adapting to the market-type modes of action (e. g., patenting, spin-off companies, incubators, and university-industry partnerships). The raised funds from such activities are generally used for investment in quality standards and structure for education and training.

The faculty should also be encouraged to play the role of *entrepreneurial scientists* and network builders (Etzkowitz et al. 2008) to identify job market trends and skill needs, and incorporate potential opportunities into the learning curricula that will help the learners develop value creating competences. To fulfill this requirement, the supporting staff and faculty members should have the necessary competences in strategic management, project management, knowledge management, and a clear understanding of modern pedagogy.

EMUNI WORKSHOP: TOPICS AND GUIDELINES

Building on this agenda, the Workshop on 'Study programs, professional upgrading study programs, and summer schools in the Euro-Mediterranean region' organized by the Euro-Mediterranean University (EMUNI) on 22 November 2013 in Brdo pri Kranju (Slovenia) was intended to setup a knowledge sharing platform and promote debates and discussions that address the following questions:



- 1 What is the role of continuing education, professional study programs and summer schools in the current socio-economic regime in the Euro-Mediterranean region?
- 2 What continuing education and professional study programs should we develop to meet the current socio-economic needs of the Euro-Mediterranean region? [197]
- 3 What are the priority areas and competences that the Euro-Mediterranean universities should focus on to develop continuing education and professional study programs?
- 4 What needs assessment, design, delivery, and evaluation approaches should we adopt to deliver customized learning experiences?
- 5 What learning methods and approaches can we promote to maximize the benefits of continuing education and professional study programs in the Euro-Mediterranean region?
- 6 What quality assurance standards and accreditation processes should we develop to offer efficient and effective continuing education and professional study programs in the Euro-Mediterranean region?
- 7 What is the role of technology and e-Learning to deliver flexible, customized, self-paced, and collaborative learning experiences?
- 8 What partnership mechanisms should we foster to promote the university–industry–government collaboration for effective and innovative learning processes?
- 9 What is the role of faculty and supporting staff to design, deliver, facilitate, and evaluate the effectiveness of study programs, continuing education, and professional upgrading study programs?
- 10 How can the universities in the Euro-Mediterranean region support the development of the market-oriented study programs, continuing education, and professional upgrading study programs from strategic, structural, and cultural perspectives?

The workshop was performed as a brainstorming session facilitated by the author. The participants in this workshop were encouraged to

[198] provide their own perspective, contribute to addressing the abovementioned questions, and share their experiences and practices. The objective of the workshop was to come up with a tentative roadmap for successful design and delivery of study and continuing education programs by the Euro-Mediterranean universities and higher education institutions in the Mediterranean region.

CRITICAL SUCCESS FACTORS AND RECOMMENDATIONS

Besides the abovementioned action agenda, the participants stressed the importance of the following aspects:

- While recognizing the importance of the learners' motivation, a global perspective still needs to be adopted. The motivational factors can be different based on the learners' needs, expectations, and culture. A clear difference should also be made between motivation and interest, even though, from a practical point of view, such concepts are still considered as intertwined.
- Universities' culture remains a crucial element while designing and implementing professional study programs. Such a culture encompasses values, beliefs, procedures, management and leadership styles, human resource management processes, communication channels etc. While developing new programs, universities should ensure the fit between their strategies, their structural variables, and their culture.
- An assessment of the industry's cultural readiness is fundamental to understand the stakeholders' needs and expectations in regards to the social sciences profiles. It is important for the universities to develop multi-cultural Euro-Mediterranean Industrial Advisory Boards to provide clear orientations on the job market trends and human resource needs. Such Advisory Boards can also help identify the specific criteria and mechanisms to facilitate the recognition of issued degrees by employers in different Euro-Mediterranean countries.
- When performing a needs assessment in order to set the learning objectives and the design criteria, particularly in the case of the Euro-Mediterranean programs, priorities should be iden-



tified based on both technical skill requirements and cultural aspects. The Euro-Mediterranean universities should also seek dual or multiple branding strategies through building dual or multiple study programs with partners from different countries to attract students and also accommodate different cultural and skill needs.

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- To support the network-based structure of the majority of Euro-Mediterranean universities and to ensure its smooth functioning, it is fundamental to set efficient communication channels to promote knowledge sharing and idea generation processes among partners that can consequently inform decision makers to support the program design and implementation. It is also suggested to develop specific Consortia for each study program, involving universities, industry, and government.
- While designing the study programs, an increasing emphasis should be placed on team work. Small teams of learners can work on real problems identified by the industry partners to promote collaborative work, as well as problem-based and project-driven learning. Such collaborative work can be supported through the use of efficient, flexible, and modular e-Learning technologies.
- For evaluation matters, the Euro-Mediterranean universities should focus more on the quality criteria including placement rate, learning processes, employability, entrepreneurial behaviors (e.g., patents and spin-offs), instead of the current interest in primarily assessing the quantitative criteria (e.g., student body, number of programs etc.) to meet the budgetary and reporting requirements.

To sum up, it is highly recommended that the Euro-Mediterranean universities incorporate the following practices when designing and the study program curricula:

- 1 The Euro-Mediterranean universities should act as network-based academic institutions through building strong cooperation ties and effective collaborative learning and research programs involving other academic institutions, industry partners,

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and government organizations. Through the mapping of all members' competences, areas of expertise, and context specific expectations, the Euro-Mediterranean universities can assess the needs at a large scale and leverage distinctive capabilities and competences to design customized, market-oriented, and project-driven study programs. This can also help such universities in their assessment of the potential members' in-kind contributions (know-how, infrastructure and logistics etc.) to ensure efficient implementation of various collaborative actions. Through such competence mapping, the Euro-Mediterranean universities can (a) build and deliver dual or multiple study programs fitting the needs of specific markets, (b) develop solid collaboration mechanisms with industry and government at local and regional levels, (c) setup multi-cultural advisory boards to help with program design, delivery, evaluation, and sustainability, and (d) seek program accreditation in different countries based on comprehensive quality assurance criteria. The Euro-Mediterranean academic networks will also serve as promotion channels to communicate the study programs in different countries and identify potential learners and stakeholders. The same competence mapping process can be used to identify research strengths, resources, and opportunities for subsequent planning and development.

- 2 While designing study programs, the Euro-Mediterranean universities should integrate innovative, value-adding, and value-generating learning processes and applications. Such innovative processes should involve mentors, learners, tutors, and testimonials who will be working collaboratively according to a network configuration to integrate theory and practice and facilitate dynamic and experiential learning, as well as market-oriented competence development. Such interdisciplinary learning processes should also make use of diversified knowledge resources and promote the integration of technology to support interactive learning, access to multi-domain knowledge, team-based and collaborative projects, and lifelong learning.
- 3 The Euro-Mediterranean universities should also apply the



principles of Instructional Design when developing study programs, including:

- *Needs assessment*: based on the learners' self-efficacy to determine the intended learning objectives and target competences and skills;
- *Design*: to develop content and select the most appropriate learning methods based on the learners' readiness, their learning styles, and the conditions to transfer learning to the job market;
- *Delivery*: to select the trainers and decide on the location and time variables;
- *Evaluation*: to assess the learners' reaction, learning outcomes, behavioral changes, and the results of the learning experience.

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- 4 The Euro-Mediterranean universities should also promote the use of e-Learning and distance education technologies to facilitate the collaboration among members and the access of learners to rich content and diverse knowledge resources. Such technologies can also provide flexible, interactive, and dynamic learning experiences through the adoption of specific applications, including video/audio files, virtual classrooms and online tutoring, virtual libraries, online tests, online simulations, learning games, online forums and chat rooms etc. The Euro-Mediterranean universities can initially experiment with such technologies through the blended-learning mechanisms and MOOCs (Massive open online courses). In the long run, action should focus on making such universities real technological Euro-Mediterranean Hubs on e-Learning and Distance Education in specialized fields.

CONCLUSION

Technological advances, globalization, and socio-economic transformations are causing higher education institutions to rethink their educational offerings in order to meet the increasing demand for knowledge workers having distinctive profiles, entrepreneurial attitudes, and

innovation skills. In such an ever-changing environment, the academic and training institutions in the Euro-Mediterranean region are expected to adopt innovative and interdisciplinary learning processes that leverage collaborative networks and team-based projects, involve different stakeholders, promote the use of multi-domain knowledge resources and technology, facilitate interactive working mechanisms, and target specific market-oriented competence needs. This paper presents an action agenda on how higher-education institutions in the Euro-Mediterranean region can develop strong collaboration ties with other academic organizations, businesses, and governments to build synergies, leverage their assets and capabilities, maximize learning, identify market opportunities, and diversify continuing education offering. This will also require a clear transformation in terms of academic management and organizational structures to support the collaborative networks and gain the necessary flexibility that will help the universities to respond efficiently and effectively to the increasing market needs. Based on the data collected during the EMUNI's workshop in 2013 this paper also suggests the critical success factors and recommendations on how to facilitate the required transformation in the Euro-Mediterranean universities and continuing education institutions from strategic, organizational, and cultural perspectives. We believe these recommendations have the potential to lay the foundations for a roadmap to support the development of value-adding continuing education processes and programs.

REFERENCES

- Brakeley, H. H., and J. C. Meister. 2005. 'How Corporate Education Can Boost Performance.' *Outlook*, no. 1.
- Alexander, E. R. 2001. 'What Do Planners Need to Know?' *Journal of Planning Education and Research* 20 (3): 376–80.
- Alvares, R. E. C., J. G. Vargas-Hernández, G. N. Figueroa Ibarra, and M. E. Sandoval Lopez. 2013. 'Entrepreneurial Abilities Development at Universities: The Case of Polytechnic University of Zacatecas, Mexico.' *International Journal of Management, Knowledge, and Learning* 2 (2): 243–54.
- Amaral, A. 1991. 'The University and Technological Transfer.' Paper presented at the 1xe Assemblée Générale de la CRE, Geneva.



- Anderson, J. R. 1982. 'Acquisition of Cognitive Skill.' *Psychological Review* 89 (4): 369–406.
- Atherton, A. 2007. 'Preparing for Small Start-Up: "Pre-start" Activities in the New Venture Creation Dynamic.' *Journal of Small Business and Enterprise Development* 14 (3): 404–17.
- Bandura, A. 1977. *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barnett, R. 1994. *The Limits of Competence: Knowledge, Higher Education and Society*. Buckingham: SRHE and Open University Press.
- Clark, B. R. 1991. 'The Fragmentation of Research, Teaching, and Study: An Explorative Essay.' In *University and Society: Essays on the Social Role of Research and Higher Education*, edited by M. Tow and T. Nybom, 101–111. London: Jessica Kingsley.
- . 1998. *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. Oxford: Elsevier Science.
- Cope, J. 2005. 'Toward a Dynamic Learning Perspective of Entrepreneurship.' *Entrepreneurship Theory and Practice* 29 (4): 373–97.
- Corbett, A. C. 2005. 'Experiential Learning Within the Process of Opportunity Identification and Exploitation.' *Entrepreneurship: Theory and Practice* 29 (4): 473–91.
- Cummings, W. K. 1999. 'The Service Orientation in Academia, or Who Serves in Comparative Perspective.' In *Higher Education at the Crossroads: Studies in Comparative and International Education*, edited by I. Fägerlind, I. Holmesland, and G. Strömquist, 223–32. Stockholm: Stockholm University.
- Drucker, P. 2000. 'Putting More Now in Knowledge.' *Forbes* 165 (11): 84–8.
- Elia, G., and A. Poce. 2010. *Open Networked i-Learning: Models and Cases for 'Next-Gen' Learning*. New York: Springer.
- Etzkowitz, H., M. Ranga, M. Benner, L. Guarany, A. M. Maculan, and R. Kneller. 2008. 'Pathways to the Entrepreneurial University: Towards a Global Convergence.' *Science and Public Policy* 35 (9): 1–15.
- Etzkowitz, H., and C. Zhou. 2008. 'Building the Entrepreneurial University: A Global Perspective.' *Science and Public Policy* 35 (9): 627–35.
- Gibb, A. 2001. 'Creating Conducive Environments for Learning and Entrepreneurship.' Address to the Conference of the Entrepreneurship Forum, Naples, 21–24 June.
- . 2002. 'In Pursuit of a New "Enterprise" and "Entrepreneurship" Paradigm for Learning, Creative Destruction, New Values,

[203]

- New Ways of Doing Things and New Combinations of Knowledge.' *International Journal of Management Reviews* 4 (3): 233–69.
- Gibbons, M., C. Limoges, H. Nowotny, S. Schwartzman, P. Scott, and M. Trow. 1994. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*. London: Sage.
- Gorman, G., D. Hanlon, and W. King. 1997. 'Some Research Perspectives on Entrepreneurship Education, Enterprise Education and Education for Small Business Management: A Ten Year Literature Review.' *International Small Business Journal* 15 (3): 56–77.
- Hanke, R., and E. Kisenwether. 2005. 'A Scalable Problem-Based Learning System for Entrepreneurship Education.' Paper presented at the Academy of Management Meeting, Honolulu, 5–10 August.
- Hawkins, R. 1998. 'Why Do All Planners Need to Be Managers?' *Planning for the Natural and Built Environment*, no. 1249: 21.
- Heinonen, J., and S. A. Poikkijoki. 2006. 'An Entrepreneurial-Directed Approach to Entrepreneurship Education: Mission Impossible?' *Journal of Management Development* 25 (1): 80–94.
- Hindle, K. G., and A. Angehrn. 1998. 'Crash Landing at INSEAD: Initiating a Grounded Theory of the Pedagogical Effectiveness of Simulation Games for Teaching Aspects of Entrepreneurship.' Paper presented at the 8th Annual Global Entrepreneurship Research Conference, Fontainebleu.
- Holcomb, T. R., D. R. Ireland, J. R. Holmes Jr., and M. A. Hitt. 2009. 'Architecture of Entrepreneurial Learning: Exploring the Links among Heuristics, Knowledge, and Action.' 33 (1): 167–92.
- Honig, B. 2004. 'Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning.' *Academy of Management Learning and Education* 3 (3): 258–73.
- Kolb, D. A. 1984. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall.
- Kristensen, B. 1999. 'The Entrepreneurial University as a Learning University.' *Higher Education in Europe* 24 (1): 35–46.
- Meira Soares, V. A., and A. M. S. C. Amaral. 1999. 'The Entrepreneurial University: A Fine Answer to a Difficult Problem?' *Higher Education in Europe* 24 (1): 11–21.
- Miclea, M. 2004. "'Learning to Do" as a Pillar of Education and its Links to Entrepreneurial Studies in Higher Education: European Contexts and Approaches.' *Higher Education in Europe* 29 (2): 221–31.



- Mintzberg, H., and J. Gosling. 2002. 'Educating Managers Beyond Borders.' *Academy of Management Learning and Education* 1 (1): 64–75.
- Mumford, A. 2006. 'Action Learning: Nothing so Practical as a Good Theory.' *Action Learning: Research and Practice* 3 (1): 69–75.
- Neave, G., and F. Van Vught. 1994. *Government and Higher Education Relationships across Three Continents: The Winds of Change*. London: Pergamon. [205]
- Ozawa, C. P., and E. P. Seltzer. 1999. 'Taking our Bearings: Mapping a Relationship among Planning Practice, Theory and Education.' *Journal of Planning Education and Research* 18 (3): 257–66.
- Pawlowski, K. 2001. 'Towards the Entrepreneurial University.' *Higher Education in Europe* 26 (3): 427–36.
- Politis, D. 2005. 'The Process of Entrepreneurial Learning: Conceptual Framework.' *Entrepreneurship Theory and Practice* 29 (4): 399–424.
- Rae, D. 2006. 'Entrepreneurial Learning: A Conceptual Framework for Technology-Based Enterprise.' *Technology Analysis and Strategic Management* 18 (1): 39–56.
- . 2009. 'Connecting Entrepreneurial Learning and Action Learning in Student-Initiated New Business Ventures: The Case of SPEED.' *Action Learning: Research and Practice* 6 (3): 289–303.
- Rae, D., and M. Carswell. 2001. 'Towards a Conceptual Understanding of Entrepreneurial Learning.' *Journal of Small Business and Enterprise Development* 8 (2): 150–8.
- Remeikiene, R., D. Dumciuviene, and G. Startiene. 2013. 'Explaining Entrepreneurial Intention of University Students: The Role of Entrepreneurial Education.' In *MakeLearn 2013: Active Citizenship by Knowledge Management & Innovation*, edited by V. Dermol, N. Trunk Širca, and G. Đaković, 299–307. Bangkok, Celje, and Lublin: To-KnowPress.
- Sternberg, J., and T. Lubart. 1999. 'The Concept of Creativity: Prospects and Paradigms.' In *Handbook of Creativity*, edited by J. Sternberg, 3–15. Cambridge: Cambridge University Press.
- Vesper, K., and W. McMullan. 1988. 'Entrepreneurship: Today Courses, Tomorrow Degrees?' *Entrepreneurship Theory and Practice* 13 (1): 7–13.
- Volkman, C. 2004. 'Entrepreneurship Studies – An Ascending Academic Discipline in the Twenty-First Century.' *Higher Education in Europe* 29 (2): 177–85.
- Warren, L. 2004. 'A Systemic Approach to Entrepreneurial Learning: An Exploration Using Storytelling.' *Systems Research and Behavioral Science* 21 (1): 3–16.

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Weick, K. 1995. *Sensemaking in Organizations*. Newbury Park, CA: Sage.

Wong, C. 1998. 'Old Wine in a New Bottle? Planning Methods and Techniques in the 1990s.' *Planning Practice and Research* 31 (3): 221–36.

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