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How Students Are Taught Entrepreneurship in Universities

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Abstract

Rapid changes in an increasingly complex world require future graduates to acquire more than academic attainment in order to transform such challenges into opportunities for change, and make a difference in their communities. There is a valid political imperative in the UK for the development of a strong enterprise culture as a response to the challenges and opportunities presented by continuing globalisation. Universities, through graduate enterprise and entrepreneurship education, play a vital role in preparing and equipping students with the entrepreneurial mindsets, knowledge and capabilities needed to bring about transformation in the organisations that they will lead and manage in future.

This paper presents a conceptual review of the different types of pedagogical approaches which are used for the promotion of entrepreneurial learning in higher education. It begins with a review of the political pressure on universities to respond to the concept of the enterprise culture in the UK and Europe. This starting point addresses the question as to 'why' entrepreneurship education is seen to be of growing importance. This paper then proceeds to examine the different types of pedagogical approaches which have been used in teaching and learning entrepreneurship. Whilst the use of business plans remain a popular approach, there is a growing recognition of its limitations and a noticeable shift towards experiential approaches. There is an emerging consensus in the literature to suggest that the development of entrepreneurial graduates requires a more experiential approach to learning, which is preferably action-based and student-centred, focusing on the development of entrepreneurial skills and competencies associated with entrepreneurship. It is argued that learning for entrepreneurship cannot be abstracted from the situation in which it is acquired and used. Within an entrepreneurial curriculum, students learn from and through experience within learning environments that simulate 'real-world' situations.

Keywords: Entrepreneurship; Entrepreneurship Education; Enterprise Education; Entrepreneurial Learning; Entrepreneurship Pedagogy; Graduate Entrepreneurship.

Introduction

In this era of globalisation, entrepreneurship has been recognised as being of fundamental importance for the development of dynamic economies in which competitiveness and growth can thrive, and innovation and creativity can drive new ways to improve the social and economic wellbeing. Higher Education Institutions are regarded as important agents to help them achieve this. There is evidence to suggest that academically educated entrepreneurs are more important in developing regional economies than those with a lower level of education (see, for example, Pajarinen et.al., 2006, in Taatila, 2010). In an environment where high skills lead to high value added, graduates are key to national growth. Graduates who are inspired, self-confident, talented and enterprising are more likely to found and lead dynamic new ventures and transform any organisation they join or manage (Herrmann et. al. 2008). Developing entrepreneurial graduates is therefore essential for our future success. Entrepreneurs with a higher academic background are often more innovative, use business models, and base their ventures on the use of new technology. Universities, in this context, play a vital role and are widely viewed as ideal places for the development of graduate entrepreneurs as the future creators of new ventures and wealth. For this reason, universities are challenged to endow their students with the appropriate mindsets, knowledge and abilities for entrepreneurial activities.

The growth and development in the curricula and educational programmes devoted to entrepreneurship and enterprise in the university sector have been remarkable over the last 20 years. The volume of literature in entrepreneurship education reflects the growing significance of this area of education in the same period. The debates and research on teaching and learning entrepreneurship have been wide-reaching and extensive. There is nevertheless no substantive measure of agreement in literature as to what the appropriate pedagogical approaches should be that would effectively stimulate student enterprise and graduate entrepreneurship (Rae, 2003; Politis, 2005; Gibb, 2002, 2006). To help advance an understanding of the complex nature of entrepreneurial learning, this paper seeks to make a contribution to the literature through a conceptual review of the different educational methods which are used and found to be effective for the promotion of entrepreneurial learning in higher education. It is guided by the following questions: (a) what are the different types of pedagogical approaches which have been used in teaching and learning entrepreneurship?; and (b) what can we learn from these approaches which can serve as a theoretical underpinning of entrepreneurship education?

This paper begins with a review of the political pressure on universities to respond to the concept of the enterprise culture in the UK and Europe. The sustained interest and investment for enterprise and entrepreneurship education in the last 15 years reflects clearly its perceived importance in the political

agenda. There is an increasing acceptance that the entrepreneurship education can be influential in the creation of businesses, wealth and economic opportunity. This paper then proceeds to examine the different types of pedagogical approaches which have been used in teaching and learning entrepreneurship. The implications of each of those approaches for classroom teaching and learning are discussed, and the commonalities in these approaches to entrepreneurship education can be identified. This paper concludes by suggesting that experience is crucial for understanding and embedding entrepreneurial concepts and can be delivered through pedagogies which enable students to experience entrepreneurial ways of thinking, behaving and acting by bringing the ‘real world’ into the classroom.

Methodology

The evidence base for this research paper is a detailed literature search. The primary tool which I have used to search literature is Google Scholar. An initial, general search using the phrase ‘entrepreneurship education’ generated in excess of 15,500 items. To make this more manageable, I began to set specific parameters using the advanced search tool to reduce the number of items before I started to screen and track them for relevance. For instance, by using the same phrase ‘entrepreneurship education’ but limit the search only for articles with this specific phrase in the title between 1995 and 2014 (i.e. the last 15 years), the search generated approximately 3000 items. By including the keyword ‘learning’ into the original search brought the number of items down to 136; while the inclusion of the keyword ‘teaching’ resulted in 82 items. It is through the use of this tentative, ‘trial and error’ approach that helped me locate an initial set of citations from which I made a selection for in-depth reading.

As I read, I started to follow the citation trails by examining the references of articles from which I came across other papers in the same field. By cross referencing the number of times a publication is cited by other researchers is one indication of the influence of that publication. As I ‘snowballed’ my reading by following the citation trails, my knowledge began to take shape and soon I was able to perform other, very specific searches for articles using author names or article titles until I reached saturation point. By the end of this process, a total of 118 peer-reviewed journal articles and 18 official reports have been identified as relevant and tracked, 40 of which have been used and directly referenced in this paper.

The Political Pressure for Entrepreneurship Education

In the past fifteen years, there has been an overwhelming political rhetoric focused upon the need for the creation of an enterprise culture in the UK and across Europe. The need for the creation of an enterprise culture is reflected in the focus of a number of official economic, industrial and employment reports on the role of entrepreneurship and innovation in the economy - see Table 1 for a list of recent examples.

Table 1: Examples of Official Reports in Enterprise and Entrepreneurship

Year of Publication	Title	Publishing Institution
1998	Our Competitive Future: Building the Knowledge Driven Economy	Department for Trade and Industry (UK)
2008	White Paper: Innovation Nation	Department for Innovation, Universities and Skills (UK)
2008	Enterprise: Unlocking the UK’s Talent	Department for Business Enterprise and Regulatory Reform (UK)
2013	Enterprise Education Impact in Higher Education and Further Education: Final Report	Department for Innovation, Universities and Skills (UK)
1998	Promoting Entrepreneurship and Competitiveness	European Commission (EU)
1999	Innovation in Europe – The Green Paper	European Commission (EU)
2008	Small Business Act	European Commission (EU)
2010	Europe 2020: A European strategy for smart, sustainable and inclusive growth	European Commission (EU)
2011	Programme for the Competitiveness of Enterprises and SMEs (COSME) 2014-2020	European Commission (EU)
2013	The Entrepreneurship 2020 Action Plan	European Commission (EU)

The policy thrust in enterprise and entrepreneurship is reflected in the proliferation of policies and initiatives both in the UK and across Europe in the last fifteen years. The doctrine of enterprise and entrepreneurship has

been variously endorsed and perceived as a keystone approach which will help national governments and individuals to navigate and thrive in the increasingly globalised, fast-changing and complex world in the 21st century. There is an increasing acceptance that the entrepreneurship education can be influential in the creation of businesses, wealth and economic opportunity. In higher education, graduates need more than academic attainment in order to transform their subject knowledge and skills into growth and innovation in the wider world. Whether they choose to pursue their own business start-up or a career in public, private or voluntary organisations, the challenges are common. Graduates of today and tomorrow need to develop the skills and attributes that enable them to seize and exploit opportunities, making a difference in the organisations in which they work and in the communities of which they are a part. Universities and higher education institutions are, therefore, widely regarded by public policy makers as an important agent of economic and social growth. Through graduate enterprise and entrepreneurship education, it is maintained that these institutions play a vital role in preparing and equipping students with the entrepreneurial mindsets, knowledge and capabilities needed to bring about transformation in the organisations that they will lead and manage in future.

The Pedagogical Approaches to Teaching and Learning Entrepreneurship

There is no substantive measure of agreement in literature as to what the appropriate pedagogical approaches should be that would effectively stimulate student enterprise and graduate entrepreneurship (Rae, 2000; Politis, 2005; Gibb, 2002, 2006). The debates and research on teaching and learning entrepreneurship have been wide-reaching and extensive. Table 2 offers an overview of examples of scholars who have examined pedagogy in entrepreneurship education and implications of their approach for classroom teaching and learning. Based on the evidence presented in these studies, a number of commonalities in pedagogical approaches to entrepreneurship education can be identified, and are discussed here.

It can be observed that the teaching and learning methods for entrepreneurship have varied extensively in the last two decades or so. They include the use of business plans, classics, case studies, action learning, new venture simulations, creation of real business ventures, simulations and gaming, role plays, opportunity-centred learning, use of dialogue, and collaborative/peer learning. Often, they represent an attempt of the respective scholars to construct a learning environment that simulates the nature of entrepreneurship, combine experiential and conceptual learning, and encourage students to reflect on the relationship between theory and practice.

The most popular pedagogical approach to entrepreneurship education is the teaching and monitoring the production of a business plan. With reference to Hills' (1988) study of leading entrepreneurship educators, Honig (2004) observes that the development of a business plan was identified as being the most important feature of entrepreneurship courses. In his examination of the top 100 universities in the US, Honig found 78 of these institutions offered entrepreneurship or small business management courses that centred on business plan education. However, the notion of a business plan as an adequate metaphor for successful entrepreneurship is increasingly questioned, and may not offer a valid representation of the evolving, multifaceted nature of an entrepreneurial act. Entrepreneurship often follows a non-linear, inductive process by which various products, services, and ideas are repeatedly examined, constructed, attempted and modified. The outcome of the process is the result of this inductive process, as opposed to positivist deductive rationality. Therefore, a business plan and the overtly formalised planning that it embodies would not help students learn the requisite aspects of the field, or be of any real benefit should they eventually decide to become entrepreneurs.

The use of case studies (Kreber, 2001) provides an appropriate way of learning that allow students to apply theoretical knowledge to a 'real' life situation or problem. A case study can be defined as the detailed description of a particular real life situation or problem as it happened in the past or as it could happen in the professional life of the student. A good case study, as Davis (1993: 162-163) interprets, "tells a story, raises a thought-provoking issue, has elements of conflict, promotes empathy with the central characters, lacks an obvious or clear-cut right answer, encourages students to think and take a position, demands a decision, and is relatively concise". Instructors are suggested to "give students direction or guidance in how to work with cases in the form of asking them 'to examine the protagonist's actions up to the decision point, to identify the key events, or to specify what went wrong and why". The task of the student is to analyse the case for the underlying problem, its symptoms, causes, and alternative solutions. Benson (1992) provides some interesting examples of the ways in which classical literature can be used to help students capture the essence of entrepreneurship and entrepreneurial experience, as well as learn the important principles of entrepreneurship. Like a case study, classical literature tells a story, provoke students' involvement and active

examination of the issues raised. This style of teaching and learning represents a positive move away from the lecture-based, didactic style of learning in which students typically assume a passive role.

Experiential learning (i.e. learning derived from experience) is often allied to action-based learning approaches due to the common characteristics shared between them. Action learning is founded on the premise that learning occurs through reflection on an experience or actions being taken in solving a real organisational problem (Leitch and Harrison, 1999; Rasmussen and Sørheim, 2006). The use of real or simulated business ventures (Clouse, 1990; Daly, 2001), simulations and gaming (Stumpf et.al., 1991; Low et.al., 1994; Hindle, 2002), role plays (Robertson and Collins, 2003; Ulijn et.al., 2004), and opportunity-centred learning (Rae, 2003) can be viewed as examples of reflective learning approaches with an emphasis on experience and/or action.

Table 2: Examples of Studies Examining Pedagogy in Entrepreneurship Education

Scholars	Pedagogy Approach	Understanding of Learning
Drucker (1959); Hills (1988); Kelmar (1992)	Business Plans	Students pursue the development of a business plan to gain deep understanding of issues and the functional aspects associated with a new venture start-up and development.
Benson (1992); Kreber (2001)	Use of classics or case studies	Classics (e.g. Shakespeare's Hamlet, Dicken's Tales of Two Cities, Melville's Moby Dick etc.) and case studies can be used to help students capture the essence of entrepreneurship and entrepreneurial experience.
Leitch and Harrison (1999); Rasmussen and Sørheim (2006)	Action Learning	Students learn most effectively with and from other managers while attempting to find solutions to actual, real-life problems. Emphasizes learning by doing – doing is preceded by a theoretical knowledge and facts – and being able to reflect 'in' and 'on' action.
Clouse (1990)	New Venture Simulations	Students learn from being given opportunities to make multiple simulated new venture decisions. This provides them with the basis to better understand their own new venture decision making process.
Daly (2001)	Creation of Real Business Ventures	Student learning is grounded in the experience of setting up and operating their own online business, marketing a product or service conceived and developed by the students.
Stumpf et.al. (1991); Low et.al. (1994); Hindle (2002)	Simulations and Gaming	Students learn realistic entrepreneurial experiences when they immerse themselves in a game or simulation. By providing a 'laboratory' for studying entrepreneurship, this approach allows specific aspects of the entrepreneurial process to be examined in detail.
Ulijn et.al. (2004)	Role Plays	Role plays simulate real-world situations by creating a setting within which student engage in business plan negotiations. Through creation of this artificial environment, role plays take students out of the classroom into contact with the actual experience of doing business.
Robertson and Collins (2003)	Video Role Plays	The use of video case studies of entrepreneurial role models to provide students with the ability to analyse, evaluate and synthesise the knowledge and skills required by entrepreneurs to succeed.
Rae (2003)	Opportunity-Centred Learning	The learning process focuses on the identification, development, planning and implementation of an opportunity, from idea to realisation. It combines experiential and conceptual learning, developing understanding and capability through personal development and the formation of an entrepreneurial team in which social and peer group learning takes place.
Ehiobuche et.al. (2012)	Use of Dialogue	Dialogue is a form of engagement, problem solving and education involving face-to-face, focused discussion occurring over time between groups of students and/or other relevant individuals. Through dialogue, students work together, and learn how to think together in analysing a shared problem or creating

		new learned knowledge.
Boge (2010); Ventura and Quero (2013)	Collaborative or Peer Learning	Students acquire learning considered necessary for creating new business models and formulating business plans through collaborative learning within multidisciplinary teams.

The approaches adopted by Clouse (1990) and Daly (2001) centre on facilitating students to develop the ability to make high-quality entrepreneurial decisions. The decision of whether or not to initiate a venture is central to the understanding of entrepreneurial activity. When faced with a constant flow of opportunities, knowing which opportunity to focus on and which to say no to are critical for entrepreneurs (Timmons et.al., 1985). Students are provided with multiple experiences in simulated or actual new venture decision making in order to help them deal with complex decisions involved in a new business start-up. Students learn from being given opportunities to make multiple simulated or actual new venture decisions.

Teaching with role play is an established practice in medical training and language learning (see, for example, Joyner and Young, 2006; Livingston, 1983). Engaging students in role play promotes active learning. Planned and structured role plays can be used to deliver learning experiences which simulate specific professional settings. Within entrepreneurial education, role plays can simulate real-world situations by creating a setting within which student engage with the experience of doing business through creation of this artificial learning environment. As demonstrated in a study conducted by Ulijn et.al. (2004), this approach presents students with the opportunity to exercise the negotiation skills and strategies learned in class as well as providing an interactive learning experience that offers expert feedback in a setting that is as realistic as possible. This can be combined with the use of video case studies of entrepreneurial role models (see, for example, Robertson and Collins, 2003) to provide students with the ability to analyse, evaluate and synthesise the knowledge and skills required by entrepreneurs to succeed. As an experiential and action oriented learning approach, the use of role play enables students to act as a consultant or counsellor and apply models, theories, tools and techniques to gain an understanding of the entrepreneurial process and the entrepreneur.

Rae (2003) describes an approach which is centred on the concept of opportunity. It mirrors the natural and social process of learning stimulated by human motivations such as curiosity, desire, or intentionality to find out about and accomplished a task. During the course of identifying an opportunity, people relate it to their personal and social being, plan intentionally, and act on and accomplish it. This opportunity centred learning approach, as it is aptly named, connects with entrepreneurship education because through it people recognise their world as an opportunity-rich environment, in which they face the constant challenge of investigating, making sense of, selecting and acting on opportunities.

The learning environment within which any form of experiential or action-based learning is by implication social, interactive and collaborative. The use of collaborative (Ventura and Quero, 2013) and peer (Boge, 2010) learning approaches has been demonstrated to play a crucial role in promoting student learning within an entrepreneurship curriculum. Students acquire learning considered necessary for creating new business models and formulating business plans through collaborative learning within multidisciplinary teams. Successful collaborative or peer learning is underpinned by effective interaction and communication so that collaborative creation of knowledge can take place. In other words, meaningful and constructive dialogues between participating students play an essential, enabling role in the learning process. Dialogue has been highlighted by Ehiobuche et.al. (2012) as an appropriate method of teaching and learning of entrepreneurship. Dialogue is a form of engagement, problem solving and education involving face-to-face, focused discussion occurring over time between groups of students and/or other relevant individuals. In doing so, students would encounter entrepreneurial concepts in a variety of contexts and expressed in a variety of ways, hence create more opportunities for them to become embedded in a student's knowledge system. Through dialogues, students work together, and learn how to think together in analysing a shared problem or creating new learned knowledge.

Discussion and Conclusions

Following a review of the commonly adopted pedagogies for entrepreneurship education, there is strong evidence in the literature to suggest that the development of entrepreneurial graduates requires a more experiential approach to learning, which is preferably action-based and student-centred, focusing on the development of entrepreneurial skills and competencies associated with entrepreneurship. As Hindle (2002: 237) reflects, "experiential learning and the generation of empathy for the 'real-life' situation is a vital component of entrepreneurship education". Where appropriate, students should be given ownership of their own learning objectives, and provided with multiple experiences in entrepreneurial decision making in order to help them deal with complex decisions related to real world problems and opportunities. Student learning

is, therefore, grounded in an actual or simulated entrepreneurial reality from which they acquire an authentic experience of learning 'by' and 'from' doing. Learning for entrepreneurship cannot be abstracted from the situation in which it is acquired and used. Knowing and doing are reciprocal, as Brown et.al. (1989) articulate, whereby knowledge is a product of what we do, the specific context of the action, and the culture within which it is constructed and used. Within an entrepreneurial curriculum, students learn from and through experience within learning environments which simulate 'real-world' situations, and provide opportunities for students to proactively manage their learning in which they experiment, discover, practice, and reflect on experience or actions.

The conceptual review undertaken in this study shows that the focus of much of the entrepreneurship teaching is the development of a business plan. It is noted that contemporary business planning education is structured in such a way that students may be in danger of interpreting entrepreneurship as a linear process, by which they are expected to learn the necessary analytical tools and steps, produce a high-quality plan, and only afterwards begin the activities involved in starting their ventures. However, the notion of a business plan as an adequate metaphor for successful entrepreneurship is increasingly questioned. Entrepreneurship often follows a non-linear, inductive process, as opposed to positivist deductive rationality. Therefore, a business plan and the overtly formalised planning that it embodies would not help students learn the requisite aspects of the field, or be of any real benefit should they eventually decide to become entrepreneurs. Honig (2004) contends that structured close-ended pedagogical approaches which are designed to produce a standardised formatted business plan are unlikely to be conducive for entrepreneurial activities, where the very nature of the problem as well as the necessary analytical tools employed, changes radically as the business, the market and technology evolve. Instead, the focus should be on the development of necessary skills and competencies which will help future graduates to re-evaluate, adapt, and revise activities in a resourceful manner to suit new environmental contingencies. Entrepreneurial activities have outcomes which are often impossible to anticipate. Therefore, pedagogical approaches should be developed to focus on applied hands-on, action-based activities, resulting in experiential learning.

The growing recognition of the limitation of business planning education appears to have engendered a noticeable shift towards experiential approaches, which are believed to accelerate learning, both by increasing motivation and salience, and by providing a student with an opportunity to explore the emotional and intuitive dimensions of entrepreneurship. In a field where much learning occurs through doing, pedagogical approaches that provide realistic entrepreneurial experiences have the potential to be of enormous benefit (Low et.al., 1994). There is a growing consensus that 'experience' is crucial for understanding and embedding entrepreneurial concepts and can be delivered through pedagogies which enable students to experience entrepreneurial ways of thinking, behaving and acting by bringing the 'real world' into the classroom.

References

- Benson, G.L. (1992) Teaching Entrepreneurship through the Classics, *Journal of Applied Business Research*, Vol 8, No. 4, pp. 135.
- Boge, K. (2010) To Kill Two Birds with One Stone – Use of Peer-Learning in Teaching of Innovation and Entrepreneurship at Akershus University College, *Proceedings of the 3rd Conference on Future Expertise in Higher Education*, Finland, pp.48-56.
- Brown, J.S., Collins, A. and Duguid, P. (1989) Situated Cognition and the Culture of Learning, *Educational Researcher*, Vol 18, No. 1, pp. 32-42.
- Clouse, V.G.H. (1990) A Controlled Experiment Relating Entrepreneurial Education to Students' Start-up Decisions, *Journal of Small Business Management*, Vol 28, No. 2, pp. 45.
- Daly, S. (2001) Student-operated Internet Business: True Experiential Learning in Entrepreneurship and Retail Management, *Journal of Marketing Education*, Vol 23, No. 3, pp.204.
- Davis, B. G. (1993) *Tools for Teaching*, San Francisco: Jossey-Bass.
- Department for Business Enterprise and Regulatory Reform (2008) *Enterprise: Unlocking the UK's Talent*, Department for Business Enterprise and Regulatory Reform (BERR).
- Department for Innovation, Universities and Skills (2008) *White Paper: Innovation Nation*, Department for Innovation, Universities and Skills (DIUS).
- Department for Innovation, Universities and Skills (2013) *Enterprise Education Impact in Higher Education and Further Education: Final Report*, June, Department for Innovation, Universities and Skills (DIUS).
- Department for Trade and Industry (1998) *Our Competitive Future: Building the Knowledge Driven Economy*, Department for Trade and Industry (DTI).

- Drucker, P.F. (1959) Long-Range Planning - Challenge to Management Science, *Management Science*, Vol 5, No. 3, pp. 238-249.
- Ehiobuche, C., Tu, H-W. and Justus, B. (2012) Dialogues as a Tool for Teaching and Learning of Entrepreneurship, *Proceedings of the ASBBS Annual Conference: Las Vegas*, Vol 19, No. 1, pp. 300-309.
- European Commission (1998) *Promoting Entrepreneurship and Competitiveness*, European Commission.
- European Commission (1999) *Innovation in Europe – The Green Paper*, European Commission.
- European Commission (2006) *Implementing the Community Lisbon Programme: Fostering entrepreneurial mindsets through education and learning*, Brussels, European Commission.
- European Commission (2010) *Europe 2020: A European strategy for smart, sustainable and inclusive growth*, European Commission.
- European Commission (2011) *Programme for the Competitiveness of Enterprises and SMEs (COSME) 2014-2020*, European Commission.
- European Commission (2013) *The Entrepreneurship 2020 Action Plan*, European Commission.
- Gibb, A. (2002) In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge, *International Journal of Management Reviews*, Vol 4, No. 3, pp. 233-269.
- Gibb, A. (2006) *Entrepreneurship: Unique Solutions for Unique Environments: Is it possible to achieve this with the existing paradigm?*, Working Paper 038/2006, National Council for Graduate Entrepreneurship (NCGE) UK.
- Herrmann, K., Hannon, P., Cox, J. and Ternouth, P. (2008) *Developing Entrepreneurial Graduates: Putting entrepreneurship at the centre of higher education*, National Council for Graduate Entrepreneurship (NCGE) UK.
- Hills, G.E. (1998) Variations in University Entrepreneurship Education: An Empirical Study of an Evolving Field, *Journal of business venturing*, Vol 3, No. 2, pp. 109-122.
- Hindle, K. (2002) A Grounded Theory for Teaching Entrepreneurship Using Simulation Games, *Simulations and Gaming*, Vol 33, No. 2, pp.236.
- Honig, B. (2004) Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning, *Academy of Management Learning & Education*, Vol 3, No. 3, pp. 258-273.
- Joyner, B. and Young, L. (2006), Teaching Medical Students Using Role Play: Twelve Tips for Successful Role Plays, *Medical Teaching*, Vol 28, No. 3, pp. 225-229.
- Kelmar, J.H. (1992) Business Plans for Teaching Entrepreneurial Behaviour, *Education and Training*, Vol 34, No. 1, pp. 30.
- Kreber, C. (2001) Learning Experientially through Case Studies? A Conceptual Analysis, *Teaching in Higher Education*, Vol 6, No. 2, pp. 217-228.
- Leitch, C. and Harrison, R. (1999) A Process Model for Entrepreneurship Education and Development, *International Journal of Entrepreneurial Behaviour and Research*, Vol 5, No. 3, pp. 383.
- Livingstone, C. (1983), *Role Play in Language Learning*, Longman.
- Low, M., Venkataraman, S. and Srivatsan, V. (1994) Developing an Entrepreneurship Game for Teaching and Research, *Simulation and Gaming*, Vol 25, No. 3, pp. 383.
- Politis, D. (2005) The Process of Entrepreneurial Learning: A Conceptual Framework, *Entrepreneurship: Theory and Practice*, Vol 29, No. 4, pp. 399-424.
- Rae, D. (2000) Understanding entrepreneurial learning: a question of how?, *International Journal of Entrepreneurial Behaviour and Research*, Vol 6, No. 3, pp.145-159.
- Rae, D. (2003) Opportunity Centred Learning: An Innovation in Enterprise Education?, *Education and Training*, Vol 45, No. 8/9, pp. 542-549.
- Rasmussen, E.A., Sørheim, R. (2006) Action-based entrepreneurship education, *Technovation*, Vol 26, No. 2, pp. 185-194.
- Roberson, M. and Collins, A. (2003) The Video Role Model as an Enterprise Teaching Aid, *Education and Training*, Vol 45, No. 6, pp. 331.
- Stumpf, S.S, Dunbar, R.L.M and Mullen, T.P. (1991) Developing Entrepreneurial Skills through the use of Behavioural Simulations, *Journal of Management Development*, Vol 10, No. 5, pp. 32-45.
- Taatila, V.P. (2010) Learning Entrepreneurship in Higher Education, *Education and Training*, Vol 52, No. 1, pp. 48-61.
- Timmons, J.A., Smollen, L.E. and Dingee, A.L.M. (1985) *New Venture Creation: A guide to Entrepreneurship*, RD Irwin.
- Ulijn, J., Duill, M. and Robertson, S. (2004) Teaching Business Plan Negotiation: Fostering Entrepreneurship Among Business and Engineering Students, *Business Communication Quarterly*, Vol 67, No. 1, pp.41.

Ventura, R. and Quero, J.M. (2013) Collaborative Learning and Interdisciplinarity Applied to Teaching Entrepreneurship, *Procedia-Social and Behavioral Sciences*, Vol 93, pp. 1510-1515.