

THE ROLE OF EUROPEAN PROJECTS IN LEVERAGING ENTREPRENEURIAL INITIATIVES OF STUDENTS FROM ROMANIAN BUSINESS SCHOOLS

Capatina Alexandru¹, Micu Adrian², Nicolescu Ciprian³, Cristache Nicoleta⁴ and Micu Angela-Eliza⁵

¹ Dunarea de Jos University of Galati, Romania, alexandru.capatana@ugal.ro

² Dunarea de Jos University of Galati, Romania, adrian.micu@ugal.ro

³ Bucharest Academy of Economic Studies, Romania, ciprian.nicolescu@gmail.com

⁴ Dunarea de Jos University of Galati, Romania, cristache.nicoleta@yahoo.de

Ovidius University of Constanta, Romania, angelaelizamicu@yahoo.com

ABSTRACT: Tracking the experiences acquired in a European project called “SIMPRACT - Transition from school to active life through internships and the creation of simulated enterprises”, this article aims at exploring students’ perception regarding the advantages of active learning in a virtual business environment, respectively on the benefits related to the engagement in the virtual companies, in order to discover the added-value of this project to entrepreneurship education in Romania. The students’ feedback on SIMPRACT activities demonstrated that they gained expertise on dealing with specific issues, enabling their reactivity on the future real business complexity. The managerial implications of this project are obvious, as an important contribution to entrepreneurship education through active learning in Romanian business schools.

KEYWORDS: entrepreneurship, virtual enterprise, active learning, simulation

1. INTRODUCTION

According to EUROPEN-PEN International (PEN), a practice enterprise (also known as a virtual enterprise) is a virtual company that runs like a real business tailored to a real firm's business procedures, products and services. It provides students or trainees with hands-on business skills and enhances their knowledge and experiential learning of most common business practices (<http://www.penworldwide.org/practiceenterprise.html>).

Recalling the conclusions of a research conducted by European Foundation for Entrepreneurship Research (EFER), European business schools should formalize entrepreneurship as an important part of the curriculum, by integrating entrepreneurship topics into other courses, developing partnerships with business and entrepreneurs, supporting projects and training programs for entrepreneurship experiential learning and encouraging the sharing of good practices, across their own institution, as well as with other business schools [1].

Business schools from worldwide are constantly facing challenges to develop entrepreneurial initiatives, able to support student’s active learning about the entrepreneurial process, opportunity recognition, entry strategies, financial projections, external assistance for start-ups and small business [2].

Given the considerable attention and resources allocated by business schools in entrepreneurial projects, students who have learned to plan their wishful business idea prove increased mastery, knowledge, and comprehension that would assist them in the process of creating a start-up [3].

Empirical analyses demonstrated that university spin-offs/start-ups tends to remain local initiatives; thus, business schools’ deans should devote an increasing attention to find out opportunities to finance projects for entrepreneurial education [4].

In this context, the goal of the current research is to reveal the benefits of entrepreneurship active learning in a virtual business environment, provided by a European project called

SIMPRACT - Transition from school to active life through internships and the creation of simulated enterprises (April 2014 - December 2015), co-financed through European Social Fund through the Sectoral Operational Programme Human Resource Development 2007-2013 – project promoter and coordinator: National Council of Private SMEs in Romania (CNIPMMR).

2. THEORETICAL BACKGROUND: ENTREPRENEURSHIP ACTIVE LEARNING WITHIN VIRTUAL BUSINESS ENVIRONMENTS

The majority of business schools from worldwide confronts with the following paradigm: current methods of assessing learning outcomes and guiding students have not kept pace with the necessity of active learning, or with the transformed technological infrastructure of the modern business school [5]. Excellence in teaching business disciplines is a competitive imperative at most business schools; the professors are facing the challenge of creating learning environments, such as virtual enterprise (VE) that engage, inspire, and motivate students to develop the skills they need for the real business world [6].

The active teaching framework aims to provide a bridge between education in business schools and the field of entrepreneurship and seeks to stress the scientific legitimacy of entrepreneurship education [7].

Virtual Business Learning (VBL) concept has been designed on competence based learning, communities of practice, the learning organization, authentic situated learning, learning by doing, to meet the changing learning needs of Business Schools' students – the future working professionals [8].

Real collaborative activities among companies involved in a virtual environment cannot be done before a partnership is developed among virtual companies; thus, virtual enterprises may use the business model to determine its future partnership strategy with other companies [9]. Typical features of VEs include customer-orientation, dynamic integration, professional division of duty, distributed cooperation and communications, knowledge sharing within the virtual business environment [10].

The success of a dynamic VE depends largely on the strategy deployed by its management team, able to interrelate the skills, knowledge, core competences and core resources of its members to offer value-added benefits. The virtual networks support VEs, as virtual business activities are usually conducted automatically by online applications [11].

The main advantages active learning within virtual business environments are represented by more immersive learning experiences for the learner and include the potential to provide better simulations of real-life contexts (for training) or to enhance deeper conceptual thinking (for learning) [12].

A previous research, based on the academic virtual enterprise framework, has been confirmed to be a solution for opening the conventional educational institutions, as the experiences of participants were relevant in gaining knowledge about distributed product development in virtual enterprises [13].

A highly interesting research project Fairs Net offers innovative on-line services to support trade fair activities, as well as the activities organized in Web-based virtual fairs, in order to improve the efficiency of establishing business contacts by virtual organizations [14].

Entrepreneurship education has advanced as a means to educate the new generation of entrepreneurs, by endowing students with the skills to take any area of study or discipline and be creative, innovative, and entrepreneurial [15].

One of the primary purposes of entrepreneurship education resides on the development of skills of prospective entrepreneurs to meet the challenges they will face as they plan and launch a start-up. Entrepreneurship education involves creativity skill development, in view to

help students to conduct the opportunity recognition process to bring new ideas to market, along with knowledge of how to support a culture for creativity within teams and organizations [16].

The Student Entrepreneurship Encouragement Model provides a complete overview of offerings that academic institutions can select and implement to further create a university's entrepreneurial ecosystem. Three stages could be identified in which entrepreneurs significantly benefit from certain entrepreneurial courses provided by business schools. The stages over which a business school can coordinate its offerings are the stimulation stage, the education stage, and the incubation stage [17].

The issue of how students learn from simulations has received very little attention, even if simulations were embedded in entrepreneurial education. The simulation-based assessment shows that students have achieved what they were meant to achieve in terms of knowledge, skill development and other learning outcomes [18].

In the context of entrepreneur hip education, virtual enterprises play a vital role; their goal is to exploit fast-changing market opportunities; sharing of risks, costs and competencies is the main partnership objective, within a dynamic and flexible network [19].

3. THE GAIN IN VALUABLE ENTREPRENEURSHIP EXPERTISE THROUGH ACTIVE LEARNING IN A VIRTUAL BUSINESS ENVIRONMENT

During the implementation of SIMPRACT project, we were fully aware of the necessity to analyze the feedback of the students involved in this project, in order to assess their perceptions on how their training in virtual companies contribute to the development of their entrepreneurial skills.

In this way, we designed a questionnaire, which was administrated on a sample of 120 students from three Romanian business schools („Dunărea de Jos” University of Galați, Academy of Economic Studies, Bucharest and Ovidius University of Constanta), who attended the national fairs dedicated to virtual enterprises created within this project.

The research conceptual framework involves two hypothesis (**H₁** and **H₂**), which aims at revealing the relationships between the levels of study (Bachelor/Master), considered as independent variable, and students' perception regarding the advantages of active learning in a virtual business environment, respectively on the benefits related to the engagement in the virtual companies, considered as dependent variables. The students' answers were integrated in a SPSS database in view to proceed to statistical analyses, by means of Pearson's R and Spearman correlation coefficient.

The correlation coefficient Pearson's R reveals the degree of linear association between the independent and dependent variables included in a hypothesis, having two key properties reflecting the magnitude and the direction. When its value is near zero, there is no or a weak correlation, but when it approaches to the limits (-1 or +1), it outlines a strong negative, respectively positive relationship between the variables. Spearman correlation indicates the direction of association between the independent variable and the dependent variable; thus, if the dependent variable tends to increase when the independent variable increases, the Spearman correlation coefficient is positive; otherwise, the Spearman correlation coefficient is negative. A Spearman correlation near zero highlights that there is no tendency for the dependent variable to either increase or decrease when the independent variable increases.

H₁: The level of study (Bachelor/Master) influences students' perception regarding the advantages of active learning in a virtual business environment

Table 1. Cross tabulation between the variables embedded into H₁

		Students' perception regarding the advantages of active learning in a virtual business environment					Total
		The lack of financial risks	Opportunities to test alternative business ideas	Learning through mistakes	Knowledge sharing between students	Creativity development	
Level of study	Bachelor	18	25	7	11	13	74
	Master	23	2	1	18	2	46
TOTAL		41	27	8	29	15	120

We remark significant gaps between the perceptions of Bachelor and Master students in what concern their perceptions on the advantages of active learning in a virtual business environment; the Bachelor students, who has less practical expertise, are eager to capture the opportunities to test alternative business ideas, while the Master students pay more attention on entrepreneurial training in an environment with no financial risks and appreciate the knowledge sharing of best practices in virtual enterprises educational framework.

Table 2. Symmetric measures related to the test of H₁

		Value	Asymp. Std. Error	Approx. T	Approx. Sig
Interval by Interval	Pearson's R	-0,080	0,091	-0,868	0,387
Ordinal by Ordinal	Spearman Correlation	-0,130	0,095	-1,423	0,157
Number of valid cases	120				

The results of the first hypothesis testing process are validated by Pearson's R and Spearman correlation coefficients, because their values (-0,080, respectively -0,130) are negative, but situated near zero, emphasizing a weak correlation between the independent variable (level of study) and dependent variable (students' perception regarding the advantages of active learning in a virtual business environment).

H₂: The level of study (Bachelor/Master) influences students' perception regarding the benefits of their engagement in virtual enterprises' activities

Table 3. Cross tabulation between the variables embedded into H₂

		Students' perception of benefits related to the engagement in the virtual companies					Total
		Increase of chances to be hired by real firms	Relationships with businessmen	Opportunities to be recruited by mentor companies	Acquiring knowledge to create a start-up	Networking with students from abroad	
Level of study	Bachelor	22	14	30	7	1	74
	Master	17	5	18	2	4	46
TOTAL		39	19	48	9	5	120

Analyzing the contingency table shown in Table 3, we observe that both Bachelor and Master students perceive the opportunities to be recruited by mentor companies as the most important benefit related to the engagement in the virtual companies.

Table 4. Symmetric measures related to the test of H₂

		Value	Asymp. Std. Error	Approx. T	Approx. Sig
Interval by Interval	Pearson's R	0,014	0,095	0,148	0,882
Ordinal by Ordinal	Spearman Correlation	-0,010	0,094	-0,108	0,914
Number of valid cases	120				

The results of the second hypothesis testing process are validated by Pearson's R and Spearman correlation coefficients, because their values (0,014, respectively -0,010) are situated near zero, emphasizing a weak correlation between the independent variable (level of study) and dependent variable (students' perception of benefits related to the engagement in the virtual companies).

4. CONCLUSIONS AND FUTURE RESEARCH AGENDA

Entrepreneurship education considers virtual environments as perfect departing points for the students from business schools, who are looking to improve their entrepreneurial skills in a free risk environment. The active learning approach, carefully applied in the particular case of virtual enterprises managed by all the universities involved in SIMPRACT project, has multiple advantages: the students proved initiatives to take full responsibility in their decisions, but also excellent skills to manage business transactions with other practice enterprises from Romania and abroad.

Being one of the most relevant projects for developing entrepreneurial spirit among business schools students, SIMPRACT created synergies between students from the most representative Romanian universities, as a result of active learning of practical ways to create a start-up and manage virtual transactions, to enhance creativity and knowledge sharing.

The success stories of the Romanian virtual enterprises which attended two international virtual trade fairs (Italy and Germany) and won significant prizes are the precursors for other European projects focused on the support of entrepreneurial spirit among Romanian business schools students.

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