

Organizing Studies Entrepreneurially to Adjust Inner and Outer Worlds during COVID-19

Karine OGANISJANA

Faculty of Engineering Economics and Management, Riga Technical University
Riga, 6 Kalnciema Str., LV-1048, Latvia

Mats WESTERBERG

Department of Social Sciences, Technology and Arts, Luleå University of Technology
Luleå, SE-97197, Sweden

Lenita HIETANEN

Faculty of Education, University of Lapland
Rovaniemi, PO BOX 122, 96101, Finland

ABSTRACT¹

This study aims to analyze the effect of a five-stage strategy elaborated within the Erasmus+ project FOrSE (Framework for Organizing Studies Entrepreneurially) realized by three EU universities. The strategy was integrated into a study course of Pedagogy to enhance entrepreneurial mindsets and behaviors of first-year international master's students who did not have the opportunity for face-to-face studies due to the quarantine. The key focus of the strategy is to promote students' ability to analyze the problems they face them during the COVID-19 pandemic and to identify and/or realize new opportunities in the face of worry and uncertainty. The qualitative content analysis of the master's students' reflections and the analysis of the challenges they faced, including the new opportunities they identified and/or realized, showed that they tried to adjust their inner world to the events which taking place in the outer world in order to gain self-confidence and achieve harmony.

Keywords: organizing studies entrepreneurially, inspiration, opportunity identification, opportunity realization, self-negotiated action, COVID-19.

1. INTRODUCTION

Uncertainty about today and tomorrow, drastic changes in lifestyle and dramatically increasing consequences of the COVID-19 pandemic worldwide have brought into question almost all aspects of life organization and values. One of the crucial issues concerns education and the way it should be organized in order to promote 21st century competences to help learners enhance their self-confidence in the rapidly transforming world without getting lost in the labyrinth of life, to feel strong and

whole, and to be in dialogue with their own selves and the outer world. Its importance cannot be overestimated in the reality of considerable degree of fear, worry and concern induced by the COVID-19 pandemic threatening not only physical but also mental health of people [1].

One of the ways of accomplishing this complex task could be to organize studies in an entrepreneurial way, the ultimate goal is seen as helping learners to become self-negotiated actors who are capable to "direct their conscious thinking and action towards an adjustment of their inner and outer worlds in order to succeed in life" [2:58]. Emphasizing the topicality of such learning outcomes for all students regardless of their specializations, the authors suggest that the accent should be shifted from 'studying for entrepreneurship' to 'studying entrepreneurially' by embedding opportunity-centered learning strategies into general educational practice even for learning study disciplines traditionally not related to business and entrepreneurship. This will enhance the quality of higher education and make it possible to overcome the five learning gaps of university students between: 1) recall and understanding, 2) understanding and ability, 3) ability and wanting to; 4) wanting to and actually doing, 5) actually doing and ongoing change, highlighted by Greg Light and Roy Cox [3]. Organizing studies entrepreneurially tends to promote students' development-oriented entrepreneurial mindset across a broad range of pedagogical practices and contexts, strengthening such essential entrepreneurial skills as: courage, responsibility, initiative, tolerance for ambiguity, interactivity, and ability to collaborate and creativity [4]. Such organization of the teaching and learning process enhances the practical value of education as it is linked to real life situations, problem solving, and new value creation inspired by the environment in which we live. More so, it triggers multiple active learning channels that not only accelerate the development of students' diverse

¹ Justin Wesley Bancroft. Riga Technical University.
Peer language editor.

skills, cognitive power and creative behavior, but also increases their motivation to become more involved in such a learning process, causing them new positive emotions, opening new development horizons and disclosing new greater needs to be analyzed and met in further studies, regardless of the subjects of study [5]. Therefore, working entrepreneurially should not only be seen as dealing with business, but in a broader sense for making learners proactive, cooperative, responsible and creative decision makers. For this reason, it is argued that it would be beneficial to conduct research which would be best suited to bring out the relationship in business and entrepreneurial behavior, especially in non-business education at different levels [6; 7]. However, the new reality of the COVID-19 pandemic raises additional challenges for this area of research, as it is more practice-based while at the same time the present style of living in social isolation and lack of opportunities for realizing ideas in physical vs. virtual cooperation, make the organization of studies entrepreneurially a more complicated task. That is why, this research focuses precisely on exploring the opportunity of organizing online university studies in such as to ignite sparks of hope, optimism and self-confidence that dispel hopelessness, pessimism, and frustration caused by general uncertainty and anxiety.

The research questions explored are:

- 1) What challenges do students highlight in the COVID-19 pandemic?
- 2) What opportunities for personal growth and new businesses do students identify?

The research findings are based on:

- Analysis of the projects of first-year international Master students of Riga Technical University, which were elaborated and realized by them when they were in quarantine and social isolation because of the COVID-19 pandemic;
- Qualitative content analysis of students' reflections on what they have acquired through the project and how their attitude to life difficulties, thinking, actions and perceptions of life have changed while realizing the opportunities identified.

2. THE THEORETICAL FRAMEWORK FOR ORGANIZING STUDIES ENTREPRENEURIALY

Despite many contradictions, theories and counter-theories concerning the matter, structure and functions of entrepreneurship, there is one indisputable point of view shared by the majority of scholars in the field – that one central activity is opportunity identification and development [8; 9; 10]. Therefore, to enhance entrepreneurship education, different learning strategies and models have been elaborated for: opportunity exploration and realization [11]; opportunity recognition using cognitive, behavioral and action learning tools [12], opportunity identification and exploitation using

creativity-based experiential learning models [13], etc. A crucial role in opportunity discovery is played by prior experience and search [14; 15], which are tightly linked to the process of developing knowledge stored in the minds of entrepreneurs as cognitive structures created through interaction with the world around them [16; 14; 17]. These cognitive structures are afterwards processed, stretched, expanded or combined to generate new ideas [18; 19]. Thus, the more students create cognitive structures and generate new opportunities in their study process, the more they will think and behave like entrepreneurs and they will be able to apply such skills across a broad range of situations [20].

It is believed, that while passing through such a learning process, students also develop topical skills that can help them become more capable of self-negotiated action [2] and lead a successful and fulfilling life. Therefore, if we shift the emphasis from entrepreneurship education to organizing studies entrepreneurially, even within traditionally non-business-related study disciplines such as physics, biology, arts, chemistry, music, literature, etc., opportunity identification, generation, development and realization ought to become an inseparable part of broad pedagogical practice which implies:

- Recognition of new potential, ideas and opportunities derived from the study content and context [21; 22; 23];
- Having clear understanding of how knowledge and skills acquired within and across study disciplines can be applied to solve real-life problems in multiple ways for creating new values for oneself and the society [24];
- Enhancement of self-confidence based on the regular practicing of orientation in the changing study environment [6];
- Facing challenges and overcoming them to become more inspired learners [25].

Inspiration is needed for entailing motivation, energizing and directing behavior towards a desired target using triggers, such as people, ideas or events [26]. Therefore, inspiration plays a key role as a starting point in this learning and research project, which aims for the students to generate cognitive ideas based on their experiences, evaluate them and test them in practice [27].

As for the concepts of inner and outer worlds, in the scientific literature they are defined and understood in various ways. In some sources, the inner and outer worlds are given as concepts that fix the difference between everything that refers to the phenomena of the human mental sphere (the inner world), and those that do not belong to it (the outer world) [28]. It is believed that the inner world is also reality, but of a different order; more of the same, knowledge of the outer world remains imperfect without knowing the inner world of a person. The inner world contains all the variety of feelings, sensations, images, and meanings of the human mental spheres which are capable of directing human life and influencing the

outer world [29]. Hence, the cognitive processes necessary for learning, gaining experience and skills, as well as metacognitive processes which are essential for controlling, analyzing, organizing, constructing and improving the thinking process, are also constituent parts of the inner world as they belong to the human mental sphere. Therefore, in this research, psycho-emotional, self-organizational and self-developmental aspects of the challenges and opportunities identified by students are related to their inner world. Meanwhile, the economic, infrastructural and socio-organizational challenges and opportunities linked to life organization in society are related to the students' outer world (see chapter 3).

3. THE FIVE-STAGE STRATEGY FOR ORGANIZING STUDIES ENTREPRENEURIALY

The research strategy combined learning activities according to the model of organizing studies entrepreneurially with data collection conducted during the spring semester of 2020. master's students of Riga Technical University that participated in this study and research process were specialized in: Computer Systems, Business Informatics, Smart Electronic Systems, Telecommunications, Construction Business and Real Estate Management, Electronics, Entrepreneurship and Management, Aviation transport and Mechanical Engineering. The students came from India, Sri-Lanka, Pakistan, China, Azerbaijan, Lebanon, Egypt, Mexico, and Nigeria. They had just arrived in a new country thousands of kilometers away from their homelands and were confined to dormitory rooms without the opportunity to socialize or move freely to familiarize themselves with the new culture and place of living. They were to start Pedagogy as an optional study course just before the quarantine. Therefore, the study course was realized only through online and video lecturing, online consultations, and individual projects. Seeing how lost and depressed the students were at the beginning, it was decided to inspire them through the study material "Every cloud has a silver lining" elaborated within the theme "The 21st century competencies" (stage 1). It was perceived very positively by the students; therefore, they were given the task of working out and realizing their own individual projects by going through stages 2, 3, 4, and 5 of the model of organizing studies entrepreneurially described below:

1. **"Inspiration"**. Analysis of some materials aimed at inspiring students with life stories of famous people from different fields – entrepreneurship, music, sports and writing - who faced serious challenges but overcame them and became very wealthy and successful due to: positive thinking; creativity; ability to find ways out of even perplex situations; talent for seeing perspectives of growth; purposeful and systematic work, etc.
2. **"Opportunity identification"**. Students' analysis of the challenges faced by them and recognition of opportunities which could be derived from these

challenges. Choosing the most inspiring opportunity from the list and setting up a goal for doing something valuable for themselves or others.

3. **"Opportunity realization"**. Elaboration of individual projects by students and their implementation to achieve the goals with daily registration of the activities and progress in a diary.
4. **"Performance analysis"**. Writing a report by the students in which they analyse their own outcomes providing photo/video materials if possible.
5. **"Self-analysis"**. Students' reflection on what they understood while realizing the project and what has changed in their: thinking, attitudes towards difficulties and challenges, perception of life, and behavior.

The students' reports formed the body of the empirical data; after receiving all reports, their parts were reorganized in an Excel file and prepared for qualitative content analysis to answer the research questions through open coding for inductive category development [31].

The challenges highlighted by the students during the quarantine

The number of challenges indicated by each student in his/her report varied from 3 to 8 (mean = 4.93; median = 5) but in some cases due to their complex nature, the qualitative content analysis (QCA) exposed a few challenges combined in one.

Table 1
The challenges faced by the students related to their inner world

	Domains	Category	Frequency	The sum of frequencies	
Inner world	Psycho-emotional	Apathy, boredom & laziness	19	58	108
		Fear	15		
		Depression & frustration	12		
		Feeling lonely & lost	7		
		Missing family & homesickness	5		
	Self-organizational	Poor self-disciplining	16	50	
		Disturbed daily routine	10		
		Disorganization of diet	10		
		Forming undesirable habits	7		
		Passive & unhealthy lifestyle	7		

The subsequent analysis of the 21 categories developed in the QCA revealed their relation to five domains of

challenges; two of these domains – ‘Psycho-emotional’ (n=58) and ‘Self-organizational’ (n=50) are relevant to the students’ inner world which can be controlled by them (see Table 1), while the rest three domains – ‘Socio-organizational’ (n=79), ‘Economic’ (n=47) and ‘Infrastructural’ (n=23) are related to their outer world not under their control (see Table 2).

Together with the categories of Fear (n=15) and Depression & frustration (n=12) which were experienced almost by almost everyone living in the conditions of strict social isolation, there were also psycho-emotional challenges specific for this group of students who were in long-term quarantine, having just arrived in Latvia. Accordingly, all this led to apathy, boredom and laziness (n=19), intensified with the feeling lonely and lost (n=7) combined with the missing of family and homesickness (n=5) (see Table 1). Consequently, this state of mind and emotional decline led to failures in self-organization. Students mentioned that they had challenges of self-discipline (n=19), as they could not always organize their daily routine (n=10) because of irregular sleep and eating, playing computer games, watching films at nights, having long skype chats, etc. In addition, they had difficulties in organizing their diet (n=10) as many of them (male students) could not cook. This passive and unhealthy lifestyle (n=7) gradually formed undesirable habits (n=7) and weakened the inner world of the students.

As this was the spring semester of 2020 and full distance learning was in its initial state of development, students complained of a lack of human interaction with their groupmates and teachers, which negatively impacted their learning outcomes. Along with a dislike of full distance learning (n=11), the students were also unhappy with other aspects of life organization in the society (n=79) during that period (see Table 2), which came into their reality from the outer world. One of the most painful challenges among them was the lack of opportunities to travel (n=15); it turned out that these young people were active travelers who suffered of the sedentary lifestyle (n=9). The students faced serious economic challenges, as they had planned to combine university studies with job which became too hard for the realization (n=24); that caused financial difficulties (n=18) worsened by the rise of grocery prices (n=5). The restricted shopping opportunities (n=8) and the safety measures in using public transport (n=8) were infrastructure related challenges which greatly irritated the students.

Thus, the students highlighted more frequently the challenges coming from the outer world (n=148) compared to the challenges conditioned by the state of their inner world (n=108) (see Tables 1 and 2).

The opportunities for personal growth and new businesses identified by the students during the quarantine

As the time given for the realization of the project ranged from 15 days to one month, the students had enough time to undertake such activities that could lead to concrete results. Since the opportunities arose from the challenges faced, it was not surprising that they had some internal logical connection with the ‘Psycho-emotional’ (n=47), ‘Self-organizational’ (n=100), ‘Socio-organizational’ (n=29) and ‘Economic’ (n=21) domains (see Table 3).

However, no opportunities were identified related to the ‘Infrastructural’ domain as the students could neither impact any aspects of public transport nor the organization of shopping in their new place of living. At the same time a new ‘Self-developmental’ (n=110) domain was formed which turned out to be the most frequently mentioned one (see Table 3).

To overcome the psycho-emotional challenges, the students started practicing different hobbies (n=12), meditation (n=11), yoga (n=8), positive thinking exercises (n=4), also inventing different ways of entertainments (n=12) like virtual travelling, online picnicking with families and friends accompanying that with music, games, food and a lot of fun.

The opportunities identified and realized within the self-organizational domain had a very positive impact on the students as owing to them they were able to overcome the challenges mentioned within that domain – even the male students learnt to cook (photos and in some cases even the recipes of their culinary masterpieces were given in the project report) and became independent from cafes and canteens (n=27); owing to regular exercising (n=21), healthy lifestyle (n=9) and well-organized diet (n=14)

Table 2

The challenges faced by the students related to their outer world

Outer world	Domains	Category	Frequency	The sum of frequencies
	Socio-organizational	Staying indoors		25
Missing opportunities for travelling			15	
Distance learning			11	
Social distancing			11	
Sedentary lifestyle			9	
Anti-virus measures			8	
Economic	Job related problems		24	47
	Financial difficulties		18	
	Rise of grocery prices		5	
Infrastructural	Public transport		15	23
	Restricted shopping opportunities		8	
				149

some of the students managed to get rid of extra kilograms gained because of the unhealthy lifestyle (they provided their before-and-after photos); instead of useless chats and internet night serials, step by step they created a new routine to go to bed and wake up on time and manage all the daily routine and university assignments according to the schedule without procrastination (n=8); some of them even managed to analyze their expenses critically and reorganize their personal finances in such a way that they eliminated their debts and managed their finances more effectively (n=5); some students created new life plans having analyzed their own experiences, likes and dislikes (n=5).

The 'Self-developmental' opportunities identified and realized by the students make the third domain (n=110) of the group of opportunities related to the students' inner world (see Table 3).

Table 3

Opportunities identified by the students related to their inner world

Inner world	Domain	Categories	Frequency	Sum of frequencies	
	Inner world	Psycho-	Practicing hobbies	12	47
Entertainment			12		
Meditation & mental health			11		
Yoga			8		
Positive thinking			4		
Self-organizational		Cooking	27	100	
		Exercising & sporting	21		
		Organization of diet	14		
		Healthy lifestyle	9		
		Self-disciplining	8		
		Organization of daily routine	8		
		Personal finance management	5		
		Life planning	5		
Self-developmental		Learning	31	110	
		Enhancing creativity	27		
		Improving professional skills	16		
		Enhancing talents & abilities	14		
	Reading	12			
	Self-discovery	10			
	Spending time with family	9			

The majority of students devoted more energy and time to the learning of different new things important for themselves (n=31); (n=16) showing the certificates got in the end of that period.

Some students were so inspired that they decided to realize their dreams (drawing, dancing, creating internet blogs, composing songs, growing flowers and lettuce on the windowsills, writing stories, reading science fiction, etc.) which before were ignored or couldn't be devoted time to for different reasons. Thus, the students enhanced their talents and abilities (n=14) and made self-discoveries (n=10).

All of these opportunities are not business-oriented but are focused on the inner world of the students. They will not directly or immediately lead to the creation of some values for commercialization today, but they are key factors in making students' whole, physically and mentally balanced and happy in the face of the COVID-19 pandemic.

However, there were also opportunities identified and initiated to impact the outer world (n=50) such as: new value creation (n=11) - creating new types of learning courses on coding; elaborating new concepts of video-games; making homemade sanitizers using natural and harmless ingredients (ayurvedic leaves like tulasi, neem and others), etc. (see Table 4).

Table 4

Opportunities identified by the students related to their outer world

Direction	Domain	Categories	Frequency	Sum of frequencies	
Outer world	Socio-organizational	New value creation	11	29	50
		Spending time with family	9		
		Combating social distancing	9		
	Economic	New business ideas	21	21	

The students purposefully started to seek new, more fruitful ways of spending time with families (n=9) and combating social distancing (n=9) with friends; some of them even managed to elaborate business plans through skype meetings for starting businesses with families or friends or improving already existing ones (n=21).

Thus, the challenges students faced led them to identify and implement new ways of overcoming them. Nonetheless, the profiles of the distribution of frequencies of the six domains for the challenges and opportunities are different (see Figure 1). This means that the numbers of opportunities identified related to each domain do not

correlate with the number of challenges mentioned by the students. In this research such a discrepancy of the profiles does not play any specific role, as a summative effect of challenges which brought to opportunity identification is obvious.

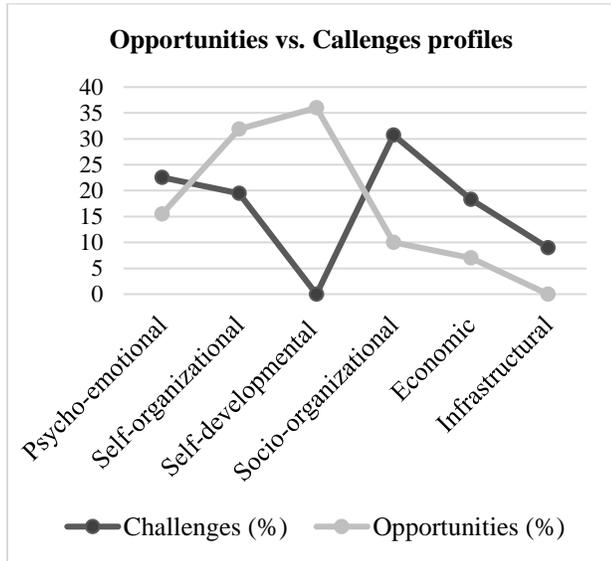


Figure 1. The distribution of frequencies of the domains of opportunities and challenges

As for the ‘Self-developmental’ domain of opportunities (this did not emerge among the domains of challenges), it could be considered as subpart of the ‘Self-organizational’ domain, as it was made possible by the students’ activities of organizing their daily life. Still, these two domains were not integrated into one with the intention emphasizing the great positive developmental by-effect caused by the students’ self-organization.

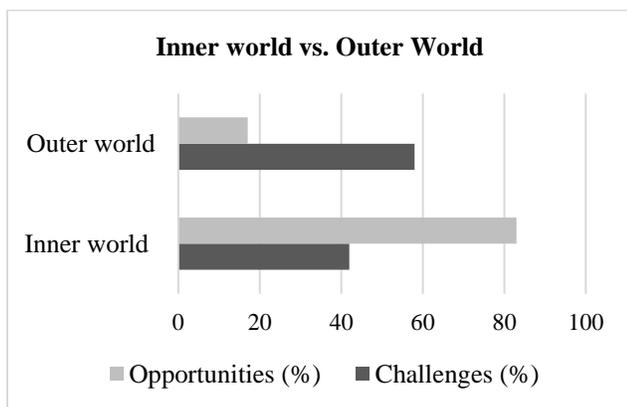


Figure 2. Analysis of the opportunities and challenges related to the students’ inner world vs. outer world

Summing up all the frequencies of the challenges and opportunities related to the inner and outer world, it was concluded that more challenges were mentioned coming

from the outer world while more opportunities were identified and realized for the perfection of the inner world (see Figure 2). This finding is very typical for humans as they usually see more problems coming from outside rather than they recognize them in their inner world as a result of critical self-analysis. And when they seek try to do good, they think first of their personal fulfillment, and only then do they direct their efforts to the perfection of the outer world.

4. CONCLUSIONS

This was an attempt to integrate and explore the impact of the five-stage strategy for organizing studies entrepreneurially into a university study course of Pedagogy relating that to the theme “The competencies topical in the 21st century”. Without expecting each student to become an entrepreneur, it was rather hoped to offer students an alternative strategy for active learning through doing, reflecting, identifying opportunities despite the crisis. They solved problems in order to transform them into new values for themselves or society - exactly in the way entrepreneurs think and act. By doing so, students adapted their inner world to the outer world in order to reveal and strengthen their potentials, to become better organised and sharpen their awareness of their own state of mind, talents, and dispositions. It is not excluded that for some of the students the discovery of their talents could become a basis for business in the future, but this will be a research problem for some other research project.

The characteristic feature of the five-stage strategy for organizing studies entrepreneurially is in its first stage - ‘Inspiration’ which acted as a trigger for self-development opportunities. The stories about people who overcame serious challenges and reached the peak of their careers energized the non-entrepreneurial students and gave them a boost of confidence that they themselves could also overcome the stress and crisis caused by the COVID-19 pandemic and realize their potential for finding opportunities to create new value for themselves and others.

The findings show that opportunities have emerged from the challenges mentioned by the students. These challenges and opportunities related to both the inner world of the students within the psycho-emotional, self-organizational and self-developmental domains and to their outer world – within the socio-organizational and economic spheres.

Thus, the five-stage strategy of organizing studies entrepreneurially could be considered as an appropriate approach to promote students’ self-determined action, as it directs learners’ conscious thinking and actions towards adjusting and balancing their inner and outer worlds in order to succeed in life. However, to generalize this pedagogical approach, more research should be conducted on the embedding of this strategy in the regular practice of other university study courses as well.

5. ACKNOWLEDGEMENT

This research was conducted within the Erasmus+ Strategic Partnership project FOrSE (Framework for Organizing Studies Entrepreneurially, 2019-1-SE01-KA203-060520) realized by Luleå University of Technology (Sweden), Riga Technical University (Latvia), and University of Lapland (Finland).

6. REFERENCES

- [1] World Health Organization, “Mental health and psychosocial considerations during the COVID-19 outbreak”, 18 March, 2020. https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf?sfvrsn=6d3578af_10
- [2] C. Jones, “A signature pedagogy for entrepreneurship education”, **Journal of Small Business and Enterprise Development**, Vol. 26 No. 2, 2019, pp. 243-254.
- [3] G. Light & R. Cox, **Learning and teaching in higher education. The Reflective professional**, London: Sage Publications, 2005.
- [4] M. Westerberg, “Conceptualizing Entrepreneurial Mindset and Entrepreneurial Competences in a School Context”, Working paper, **Center for Entrepreneurial Learning Entrepreneurship and Innovation Luleå University of Technology**, 2020, pp. 1-4. Available online: https://www.ltu.se/cms_fs/1.81121!/file/CRITIC%20conceptualization.pdf
- [5] K. Oganisjana, & H. Matlay, “Entrepreneurship as a dynamic system: A holistic approach to the development of entrepreneurship education”, **Industry and Higher Education**, Vol. 26, No. 3, June 2012, pp. 207-216.
- [6] L. Hietanen, “Entrepreneurial learning environments: supporting or hindering diverse learners?”, **Education + Training**, Vol. 57 No. 5, 2015, pp. 512-531.
- [7] L. Hietanen, & E. Kesälähti, “Teachers in general education defining and implementing work-related and entrepreneurial approaches in learning environments”, **Periodical of Entrepreneurship Education**, 2016, pp. 37-60.
- [8] R.A. Baron, “Opportunity Recognition as Pattern Recognition: How Entrepreneurs “Connect the Dots” to Identify New Business Opportunities”, **Academy of Management Perspectives**, February 2006, pp. 104–119.
- [9] S.A. Sanz-Velasco, “Opportunity Development as a Learning Process for Entrepreneurs”, **International Journal of Entrepreneurial Behaviour & Research**, Vol. 12, No. 5, 2006, pp. 251–271.
- [10] S. Sarasvathy, N. Dew, N. Velmuri, & S. Venkataraman, “Three Views of Entrepreneurial Opportunity” in Z. Acs and D. Audretsch (Eds.), **Handbook of Entrepreneurship Research**, pp. 141–160. Dordrecht: Kluwer Academic Publishers, 2003.
- [11] D. Rae, “Opportunity centred learning: an innovation in enterprise education?”, **Education + Training**, Vol. 45, No. 8–9, 2003, pp. 542–549.
- [12] G.T. Lumpkin & B.B. Lichtenstein, “The Role of Organizational Learning in the Opportunity-Recognition Process”, **Entrepreneurship Theory and Practice**, July, 2005, pp. 451-472.
- [13] A.C. Corbett, “Experiential Learning Within the Process of Opportunity Identification and Exploitation”, **Entrepreneurship Theory and Practice**, July, 2005, pp. 473-49.
- [14] J.O. Fiet, **The systematic search for entrepreneurial discoveries**. London: Quorum Books, 2002.
- [15] J. Tang, K. M. Kacmar & L. Busenitz, “Entrepreneurial alertness in the pursuit of new opportunities”, **Journal of Business Venturing**, Vol. 27, 2012, pp.77-94.
- [16] R. A. Baron, “Behavioral and cognitive factors in entrepreneurship: Entrepreneurs as the active element in new venture creation”, **Strategic Entrepreneurship Journal**, Vol. 1, No 1-2, 2007, pp. 167-182.
- [17] S. Shane & S. Venkataraman, “The promise of entrepreneurship as a field of research”, **Academy of Management Review**, Vol. 25, 2000, pp. 217-226.
- [18] T. B. Ward, “Cognition, creativity, and entrepreneurship”, **Journal of Business Venturing**, Vol.19, 2004, pp. 173–188.
- [19] R. K. Mitchel, J. B. Smith, E. A. Morse, K. K. Seawright, A.M. Perero & B. McKenzie, “Are entrepreneurial cognitions universal: Assessing entrepreneurial cognitions across cultures”, **Entrepreneurship Theory & Practice**, Vol. 26, No 4, 2002, pp. 9-32.
- [20] P. Jones, G. Maas & L. Pittaway, **Entrepreneurship Education: New Perspectives on Entrepreneurship Education, Series: Contemporary Issues in Entrepreneurship Research, Volume 7**, UK: Emerald Publishing Limited, 2017.
- [21] L. Hietanen, & H. Ruismäki, “Awakening students’ entrepreneurial selves: case music in basic education”, **Education + Training**, Vol. 58 No. 7/8, 2016, pp. 832-848.
- [22] K. Oganisjana & T. Laizans, “Opportunity-oriented problem-based learning for enhancing entrepreneurship of university students”, **Procedia - Social and Behavioral Sciences**, Vol. 213, 2015, pp. 135 – 141.
- [23] D. Rae, **Opportunity-Centred Entrepreneurship** (2nd edn), New York, NY: Palgrave Macmillan, 2014.
- [24] M. Lackeus, **Value Creation as Educational Practice - Towards a new Educational Philosophy grounded in Entrepreneurship?**, Thesis for the degree of doctor of engineering, Gothenburg: Chalmers University of Technology, Sweden, 2016.

- [25] C. S. Dweck & D. S. Yeager, “Mindsets: A view from two eras”, **Perspectives on Psychological Science**, Vol. 14, No. 3, 2019, pp. 481-496.
- [26] T. M. Thrash & A.J. Elliot, “Inspiration as a Psychological Construct”, **Journal of Personality and Social Psychology**, Vol. 84, No. 4, 2003, pp. 871–889.
- [27] D. Kolb, **Learning styles inventory**, USA, 1985.
- [28] S.S. Gusev (С. С. Гусев), “**Inner and Outer World**” (“**Внутренний и внешний мир**”), Encyclopedia of Epistemology and Philosophy of Science (Энциклопедия эпистемологии и философии науки). Moscow: Канон, 2009. с. 115-116.
- [30] A. V. Katunin (А.В. Катунин), “Observable and unobservable in the inner world of man, unobservable I (Наблюдаемое и ненаблюдаемое во внутреннем мире человека, ненаблюдаемость я)”, Human inner world (Внутренний мир человека), **Psychology and psychotechnics (Психология и психотехника)**, Vol. 3, No. 42, 2012, pp. 12-25.
- [31] P. Mayring, **Qualitative content analysis: theoretical foundation, basic procedures and software solution**, Klagenfurt: SSOAR, Open Access Repository.