ENTREPRENEURSHIP EDUCATION MANAGEMENT IN THE CONTEXT OF GLOBAL CHANGES IN ECONOMY

Iryna Markina, Poltava State Agrarian Academy
Yuriy Safonov, State Higher Educational Establishment Kyiv National Economic University named after Vadim Getman
Oksana Zhylinska, Taras Shevchenko National University of Kyiv
Tetiana Gaidai, Taras Shevchenko National University of Kyiv
Yurii Kahanov, Zaporizhzhia National University

ABSTRACT

Today, the vast majority of advancements introduced into entrepreneurship education account for the higher education system. Hence, this article explores features of the entrepreneurship education management in Ukraine and Europe from the perspective of economic transformation. The study analyses such aspects as the state of the higher system of entrepreneurship education, to identify problems; the role and place of entrepreneurship education; and factors influencing education effectiveness.

The Global Entrepreneurship Index (GEI) and GDP variables show that Ukraine has great potential in the field of entrepreneurship and for that, the government must work to improve the education system. Correlation and regression analysis revealed that social changes have a considerable effect on the entrepreneurship education system. Hence, program fitting may be reasonably prioritized as a direction of the education system improvement efforts. This can be accomplished through the creation of effective, on-demand education programs. According to the research findings, a cooperative arrangement of public and private education institutions is required. This will allow for a unified management system with a clear structure and an entrepreneurship education sector that functions better.

Keywords: Entrepreneurship Education Management, Globalization, Global Development Indices, Economic Changes, Social Capital.

INTRODUCTION

In the context of constant socio-economic development, the entrepreneurial domain of education is increasingly gaining popularity. The country's education system is a source of human capital, which, in turn, is tied directly to the economic growth. Scholars distinguish three models that underlie the relationship between education and economic growth (Acs et al., 2018; Boutayeba & Ramli, 2019). The first model argues a positive correlation between the education output (human capital) and the balanced growth (López-Bazo, 2003). Then, we have the endogenous growth theory, which encourages education institutions to focus on increasing the innovation potential more (Romer, 1990). The last model assumes that the economic growth is driven by the implementation of new technologies. Because any advancement results from good knowledge, the economic growth can be linked to the presence of educational delivery systems

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

(Nelson & Phelps, 1966). For instance, the competitive capability of the country's knowledge economy depends on the ability of higher education institutions to meet the growing demand for high-quality human capital (Alpenidze et al., 2019).

A good system of higher education is built on four pillars; infrastructure, investment, innovation, and future-oriented curriculum (Pudjiarti, 2018; Smirnov et al., 2018). Currently, the university management strategy follows the principles of productivity and effectiveness. The first principle is associated with cost minimization, which is a rather essential aspect, considering the concurrent budget reductions (Dolakova et al., 2018; Polyakov & Kravchenko, 2018). Given the requirements imposed for the education quality by society and the state, however, the principle of effectiveness, which refers to the university's focus (Welter & Smallbone, 2011), seems to be even more important.

In modern conditions, the success of freelance projects, start-ups, and a particular brand demands the presence of specific skills such as self-promotion, business planning, marketing knowledge, and social media marketing (Haase & Lautenschläger, 2011). To be effective, small businesses need to recruit competent, communicative, competitive entrepreneurs who are ready for independent goal setting and who are able to reach the goals that were set in a creative manner. From this perspective, the economic thinking and entrepreneurship skills are coming to the forefront of professional development (Ignatieva et al., 2019). Knowing the linguistic and cultural features of successful countries is also integral to successful business because these countries are potential partners. Therefore, students need to be prepared in advance for negotiations with the representatives of different cultures, given the differences between them (Dzhurinskiy, 2018; Johnstone et al., 2018).

To meet modern requirements, smart and effective education system and education management strategy are needed. Therefore, this study aims to determine the state of an entrepreneurship education management policy implied in higher education within the context of changes occurring in the global economy. To achieve this goal, the study:

- Examines the national education system of Ukraine and other European countries.
- Explores challenges that result from economic transition.
- Determines the role of education in the socio-economic development of Ukraine and European countries.
- Identifies socio-economic elements driving the development of higher education in Ukraine.

The State of Higher Entrepreneurship Education in Ukraine and Europe

The favourability of education market transformations in Ukraine is open to debate. Although educational institutions received an opportunity to build their own funds by starting business and other campaigns and to create unique education programs, the creation of educational services market is fraught with contradictions. Hence, new challenges have appeared. First, with the emergence of a self-funding option, budget allocations declined significantly. Second, there are no regulations to control the new models of education system organization (Kulinich & Zaretska, 2014).

Nevertheless, the Global Entrepreneurship Index (GEI) and GDP values demonstrate that Ukraine must work to improve its system of entrepreneurship education and thus unlock its hidden potential (Figure 1).

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

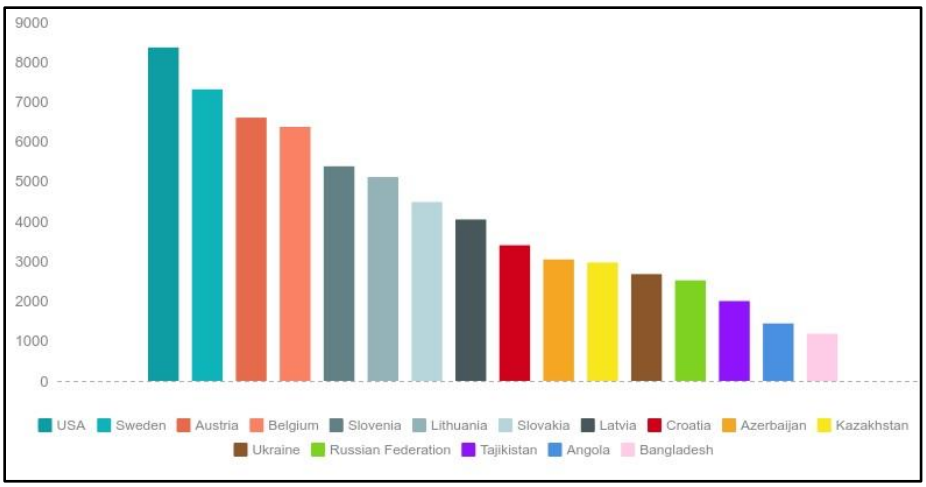

FIGURE 1
GLOBAL ENTREPRENEURSHIP INDEX (UPON DATA (KNOEMA, 2019)

The GDP increased 1.7-fold from 2009 to 2017. Interestingly, but the number of educational institutions declined during the same period, by 11.3%. Consequently, and the proportion of students in the country has decreased, 2.7-fold. This was not the only reason behind the decrease in the enrolment rate. In consequence of demographic changes and population outflow, the number of native applicants shows a downward trend.

The number of Ukrainian students enrolled in colleges or universities in Europe, hits the 80.000 mark. Just in Poland, the number of applicants from Ukraine has increased from 22.8 to 33.0 thousand in the span of three years. For Ukraine students, the most favoured countries to study abroad are Poland, the US, Canada, Czech Republic, Hungary, Germany, France. Italy, Spain and Austria. The main reasons why Ukrainians favour the European universities is that they provide more and better services. In addition, European countries have a higher level of economic development and stability (Table 1).

Table 1
DIFFERENCES IN EDUCATIONAL SERVICES DELIVERY BETWEEN UKRAINE AND EUROPE, ADAPTED FROM (ALPATOV, 2016; NATIONAL STRATEGY FOR THE DEVELOPMENT OF EDUCATION IN UKRAINE FOR 2012-2021)

Education in Ukraine	Education in Europe
Students receive theoretical knowledge in all their classes	Classes are designed in a manner such that contributes to skills development
Curriculum is set on a national level and all classes are pre-determined	Universities ensure that their curricula are flexible
Teacher have authority over students*	Teachers tend to ingratiate themselves with students
Education is free	Education is expensive
The education infrastructure is poor and does not meet the needs of students	The learning environment is favorable and comfortable to be in
*This statement may be not relevant for some Ukrainian universities today. The education system in Ukraine changes constantly and the number of teachers with *"modern thinking,"* who studied abroad continues to grow. Hence, universities are increasingly employing professionals who act as an overgrown version of students they teach.	

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

Returning back to contradictions that arose as a consequence of education market transformations in Ukraine, the quality of educational services is inconsistent with the higher education expenses such as books, supplies, living, personal items, etc. The entrepreneurship education programs do not take into account the recent surveys and market demands but continue to utilize the outdated approaches to education. Higher education institutions could ensure that these demands are met by reshaping the education but this requires investment, which government and business organisations refuse to provide. With more innovative teaching methods incorporated into the education system by young teachers, it becomes hybrid, rather than fully renovated. Hence, the old may conflict with the new, leading to an ambiguous workforce production (Zivitere et al., 2015; Kuts & Dolgushina, 2015).

Changes that took place in the European business schools are slightly different. For instance, to resolve the social justice issue, the best minds in Europe came up with a range of clever solutions, which in the long run, allowed increasing the number of students in the country and their mobility. In response to that, many new universities appeared and students became free to choose from a diverse range of services. The structure of a higher education sector thus became more complex. The non-state actors in education that were sitting around at the time found themselves more than crucial for the education system renovation. Consequently, the higher education management system was improved and a considerable effort was put to optimize the universities' spending policies. By doing this, European countries found their way into the cross-cultural domain of higher education.

Upon that, it becomes obvious that contradictions, which are present within the higher education management system in Ukraine, cannot be fully resolved due to the lack of understanding and mutual assistance between the government and society. Because the country's economic welfare directly depends on the state of entrepreneurship education system, there is an urgent need to solve problems that exist within it.

MATERIALS AND METHODS

During the study, data from the Global Entrepreneurship Index (GEI) and GDP reports were examined. GEI is a measure of economic activity, which looks at how individual countries around the world allocate resources for the development of entrepreneurship (Knoema, 2019). GDP is traditionally considered to be a measure of the country's economic development.

The analysis shows that education quality is a matter of current interest in Ukraine. In connection with shifts towards social intelligence, it became a core component of economic growth, social capital, and business climate, as we can see from the behaviour of global indices during the 2007-2017 timeframe (Legatum institute, 2018). Among these, Governance, Education, Health, Safety & Security, and Personal Freedom.

The results conclude that Ukraine lags behind with regards to the national development policy. To compete with the European education providers, the Ukrainian education sector needs to manage the existing individual and market demands. In addition, the education system serves as a social capital provider and thus is linked directly to social and economic security of the country. The entrepreneurship education system is no exception and depends on alterations in individual and market demands. The quality of education is influenced by factors such as economic quality, personal freedom, and social capital. Interrelations between these factors are complex in nature. The influence they have on the Education Index value is complex accordingly. To measure it, the multi-factor correlation-regression method was used.

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

Dependence between a composite measure and its individual components can be described by the following linear production function:

$$Y = a_0 + a_1 \times x_1 + a_2 \times x_2 + ...a_n \times x_2 \quad \ldots.(1)$$

Where: Y is the Education Index; x_1 is Economic Quality; x_2 is Personal Freedom; and x_3 is Social Capital. The remaining coefficients were calculated separately and can be found later in the text.

The multifactor regression allows evaluating the influence of various factors on the resultant. The degree of this influence can be inferred by analysing the value of the partial correlation coefficients r_{yx}^{1}, r_{yx}^{2}, r_{yx}^{3} (Tables 2-4). The inputs embrace the period 2009-2017.

Table 2
CORRELATION MATRIX TO DETERMINE THE EFFECT OF ECONOMIC QUALITY, PERSONAL FREEDOM, SOCIAL CAPITAL ON THE EDUCATION INDEX VALUE

i	x_0	x_1	x_2	x_3	Y	Xn_1	Xn_2	Xn_3	$\hat{Y}i$ theoretical level	$(Yi-Yc)^2$	$(Yi-\hat{Y}i)^2$
1	1	60.17	55.58	37.85	59.52	0.37	0.71	-0.80	60.523	6.731	1.005
2	1	60.06	50.17	43.53	60.61	0.32	-0.48	0.21	61.222	2.266	0.376
3	1	59.96	53.13	42.53	62.43	0.27	0.17	0.03	62.021	0.101	0.170
4	1	58.34	51.31	42.22	62.33	-0.50	-0.22	-0.03	62.557	0.047	0.051
5	1	59.87	53.16	42.00	62.18	0.22	0.18	-0.07	61.851	0.004	0.108
6	1	60.00	53.35	42.71	63.20	0.29	0.22	0.06	62.168	1.178	1.065
7	1	58.72	51.48	42.49	63.14	-0.32	-0.19	0.02	62.421	1.060	0.522
8	1	58.73	51.48	42.49	63.14	-0.32	-0.19	0.02	62.413	1.060	0.534
9	1	58.74	51.41	45.49	62.47	-0.32	-0.20	0.55	63.856	0.126	1.920
10	1	58.52	51.17	44.68	63.92	-	-	-	63.558	-	-
Total	9	474.42	415.489	343.448	499.511	-0.96	-0.58	0.60	559.03	12.57	5.75
The average value		59.40	52.34	42.37	62.11						
Standard deviation		0.70	1.53	1.88	1.25					D[Y]=	1.57

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

Table 3
CORRELATION MATRIX TO DETERMINE THE EFFECT OF ECONOMIC QUALITY, PERSONAL FREEDOM, SOCIAL CAPITAL ONGLOBAL EDUCATION INDEX VALUE

	[R]									
1.00	0.56	-0.39	Fkp=	5.41	det[R]=	0.276	rYX1=	-0.54	tkp=	2.57
0.56	1.00	-0.77	F1=	0.76	Xi^2=	10.36	rYX2=	-0.37	t12=	-1.07
-0.39	-0.77	1.00	F2=	3.44	Xi^2kp=	7.81	rYX3=	0.58	t13=	-0.15
			F3=	2.50					t23=	2.36
	[Z]=[R]-1									
1.46	-0.91	-0.13		r12=	-0.43		det[R]=	0.40		
-0.91	3.06	2.01		r13=	-0.07		Xi^2=	4.71		
-0.13	2.01	2.50		r23=	0.73		Xi^2kp=	12.59		
SST=	12.57	R^2=	0.54		Q=	22.85				
SSE=	5.75	Fr=	8.41		Q'=	4.88				
SSR=	6.82	Fkp=	5.41		Dy=	3.97				

Table 4
CORRELATION MATRIX TO DETERMINE THE EFFECT OF ECONOMIC QUALITY, PERSONAL FREEDOM, SOCIAL CAPITAL ONGLOBAL EDUCATION INDEX VALUE

$$Y_r = -0.88 \times 1 + 0.40 \times 2 + 0.49 \times 3 + 72.26$$

tkp	2.571								Kx_1=	-0.81
Ymin=	59.5906								Kx_2=	-0.33
Ymax=	67.5247								Kx_3=	0.35

RESULTS AND DISCUSSIONS

Paired correlation coefficients indicate the effect of individual indices (Economic Quality, Personal Freedom and Social Capital) on the Education index value. Comparing to other factors, the Economic Quality influences the Education index the less, with $r_{yx}^1 = -0.54$. Given the value $r_{yx}^2 = -0.37$, the Personal Freedom factor shows similar contribution. However, based on $r_{yx}^3 = -0.58$, we can conclude that the Education Index is strongly correlated with the Social Development Index and the Social Capital Index.

The factors x_1 and x_2 have the greatest mutual influence. By substituting a_0=72.26, a_1=-0.88, a_2=0.40, a_3=0.49 (values that were calculated separately) into the linear multiple regression model, we will obtain the following formula:

$$Y = -0.88x_1 + 0.40x_2 + 0.49x_3 + 72.26 \qquad \text{….. (2)}$$

Each coefficient in the given equation indicates degree to which the corresponding factor affects the resultant Education index. Hence, when a single factor changes by one unit only, the changes in the resultant indicator should be expected. Consequently, when Economic Quality changes by one unit (with other factors unchanged), the Education Index decreases by 0.88. When Personal Freedom Index changes by one unit (holding other factors constant), the Education Index increases by 0.40. Finally, when the Social Capital Index changes by one unit, the Education Index will increase by 0.49.

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

The next stage is to analyse the elasticity coefficient, calculated separately for each factor. Elasticity coefficient tells the proportion at which a 1% changes in a certain factor changes the Education Index value.

If the Economic Quality increases by 1%, then the Education Index will decrease by 0.81%. With the 1% increase in Personal Freedom, the Economic Quality will decrease by 0.33%. One-present increase in Social Capital will result in 0.35% increase in the Education Index. That is, the level of entrepreneurship education in Ukraine in 2009-2017 was largely dependent upon social factors only. To determine the impact of economic factors on education in European countries, the following systematization of indicators prepared by experts of the European Universities Association (EUA) (2014) was used. It allowed analysing the financial trends in higher education of European and CIS countries that took place over a certain period of time. Thus, 12 countries experienced a decrease in their education budgets and only four countries did not change the funding policy significantly (± 5%).

The EUA experts emphasize that the instability of higher education funding has been a common feature of budgetary processes in many countries throughout the study period. Due to the high rate of inflation, the universities in several countries have lost a portion of financial resources despite the nominal budget growth (in real numbers). Such losses hit the extreme in Serbia, with the nominal growth of 32% and the 8% cut to education funding. Inflation rates were also high (over 10%) during this period in Iceland, Greece, Hungary, and Lithuania, which significantly devalued the government's financial injections into the higher education (EUA. Public Funding Observatory, 2014; Jones et al., 2018; Papagiannis, 2018).

Summarizing the above, European countries that scored highest in Education Index demonstrate high growth in GDP, which is later spent on education. Since the Ukrainian government is not able to provide an annual increase in spending on higher education, we consider it appropriate to develop a system of socially oriented measures to improve the quality of entrepreneurship education. This suggestion proves reasonable, considering the effect that social factors have on education in Ukraine.

Exploring differences in education between European countries such as France, Italy, Germany, Norway, Switzerland, Greece, and the Czech Republic, the following steps towards successful entrepreneurship education management are recommended:

- Attract more people into entrepreneurship teaching.
- Provide opportunities for continuing and online education.
- Ensure equal access to quality education.
- Strengthen the role of the state in ensuring justice for learners.
- Manage the education budget effectively.
- Humanize and democratize education.
- Update the learning content, teaching modes, methods and means to meet the market demands.
- Focus on the professional competence of teachers, attract people with business experience.
- Inform people about the quality of educational services.
- Create foundations for the private educational institutions to cooperate with the local and national government.

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

Creating an effective and competitive system of entrepreneurship education is challenging due to the lack of a single department responsible for developing the necessary policies (Gribben, 2006). These responsibilities are distributed between public institutions, business support organizations, and educational organizations. Therefore, a cooperative arrangement of public and private education institutions is required. Among them, resource providers (employers, social partners, academic institutions and creative unions), educational institutions, and associations (Nikolaenko, 2008). These structures all are actively involved in entrepreneurship education management. Having a collective focus, they are motivated to improve the education system and, consequently, promote the economic growth.

The focus of higher education management is to ensure that the education sector properly functions and develops at the national, regional and local levels (Sun et al., 2017). This necessitates the socio-economic prerequisites for the higher education system to be reshaped (Kuts & Dolgushina, 2015). For instance, the Ukrainian government has to improve the efficiency of services provided by the education authorities and create a full-fledged legal framework to regulate activities that are related to education. Ukraine needs more advanced and refresher training service providers as well. Through these, employees will be able to boost one's own competence and become more valuable to the marketplace. This will contribute to the human and social capital growth.

Ukraine also needs to choose the right teaching model and build a right management strategy around it. For example, the US education model integrates philosophical, pedagogical, economic, sociological, and psychological ideas, theories and concepts. Among them, the concepts of knowledge society, continuous education, resource management, knowledge management, as well as the theory of human capital and different psychological theories (Harashchenko et al., 2019). Thereby, it is necessary to determine on what theoretical fundamentals the modern market in Ukraine is built and to build a model of business education management based on these fundamentals.

A progressive step is to ensure that individuals can obtain entrepreneurial knowledge outside of business schools and entrepreneurship universities. Today, blended entrepreneurial programs that combine entrepreneurial and technical education are gaining popularity (Turner & Gianiodis, 2017). Students of the University of Dayton, Babson College, Miami University, and Ohio Wesleyan University who learn in the blended setting show results that is fairly good in both directions. Ukraine shall study in detail how these programs were implemented to incorporate them into the native system of entrepreneurship.

All actors in education must be guaranteed protection and support at the national and/or local level (Tsindeliani, 2017; Ling & Yumashev, 2018). To ensure this, universities may seek ways to obtain own independent funds. To gain experience in entrepreneurship education management, Ukraine has to build mutually beneficial relationships with other countries. By doing so, the government will open a door for educational establishments, including those in entrepreneurial domain, to a deep pool of scientific findings and undertakings in the field education management to benefit from. This step will accelerate the pace of social and, consequently, the economic development.

In the climate of expanding intercultural interaction, the education system should focus on the aspects of sociability and tolerance more. Today, we face a situation in which certain problems can only be solved through cooperation with the international community. This requires the production of highly-skilled, forward-thinking and competitive workforce that will

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

meet the international standard. Otherwise, foreign actors will not care for building a cooperative relationship with Ukrainian institutions.

To provide high-quality education services, entrepreneurship universities need to create a competitive learning environment alongside a transparent system of progress assessment. In addition, we project the creation of a unified online educational platform that will bring together the education efforts of different countries (Turner & Gianiodis, 2018).

CONCLUSION

As of now, Ukraine and other European countries experience the renovation of higher education. These transformations are causing new individual and market demands to emerge. These demands flow originally from the lack of effective mechanisms that would allow for available, high-quality education; from the lack of education management methods; and from insufficient social and business participation. This study emphasizes the importance of reaching economic stability through the elimination of these shortcomings.

The first step towards an effective system of entrepreneurship education is to change the management policy. The lack of a single regulation mechanism negatively affects the entrepreneurial domain of education and its development. Therefore, public and private education institutions need to collaborate for a common purpose.

The correlation and regression analysis showed that the education quality is significantly influenced by social, rather than economic, changes. Upon that, efforts to improve the quality of entrepreneurship education are recommended to be socially oriented. For instance, we suggest creating an effective e-learning system, boosting the professional competence of teachers, attracting people with business experience, etc. This will allow exploiting the entrepreneurial potential of Ukraine as well as bringing business to the next level.

REFERENCES

Acs, Z.J., Estrin, S., Mickiewicz, T., & Szerb, L. (2018). Entrepreneurship, institutional economics, and economic growth: an ecosystem perspective. *Small Business Economics*, *51*(2), 501-514.

Alpatov, G.E. (2016). Four principles of management of higher education. *Scientific journal NRU ITMO. Series "Economics and Environmental Management"*, *2*, 113-122.

Alpenidze, O., Pauceanu, A.M., & Sanyal, S. (2019). Key success factors for business incubators in Europe: An empirical study. *Academy of Entrepreneurship Journal*, *25*(1), 1-13.

Boutayeba, F., & Ramli, M. (2019). The Link Between Education And Economic Growth In Algeria: An Empirical Investigation. *International Journal of Advanced Research in Education and Society*, *1*(1), 35-43.

Dolakova, M.I., Zubanova, S.G., & Pashentsev, D.A. (2018). The legal basis for the implementation of the financial policy of the state in the Russian Empire of the second half of the 19th century. *Vestnik of Saint-Petersburg University*, *9*(4), 452-466.

Dzhurinskiy, A.N. (2018). Education for people of the "third age" in Russia. *The Education and science journal, 20*(10), 156-175.

EUA. Public Funding Observatory (2014). Retrieved from www.eua.be/ eua-work-and-policy-area/governance-autonomy-and-funding/public-fundingobservat orytool.aspx

Gribben, A.A. (2006). *Entrepreneurship learning: Challenges and opportunities.*

Haase, H., & Lautenschläger, A. (2011). The 'teachability dilemma'of entrepreneurship. *International Entrepreneurship and Management Journal*, *7*(2), 145-162.

Harashchenko, L., Komarovska, O., Matviienko, O., Ovsiienko, L., Pet'ko, L., Shcholokova, O., & Sokolova, O. (2019). Models of Corporate Education in the United States of America. *Journal of Entrepreneurship Education, 22*(3).

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).

Ignatieva, G.A., Tulupova, O.V. & Matchina S.V. (2019). Technology of self-determined learning as a new format of continuing professional education of teachers. *The Education and science journal, 21*(4), 162-182.

Johnstone, L., Monteiro, M.P., Ferreira, I., Westerlund, J., Aalto, R., & Marttinen, J. (2018). Language ability and entrepreneurship education: Necessary skills for Europe's start-ups? *Journal of International Entrepreneurship*, *16*(3), 369-397.

Jones, P., Maas, G., Dobson, S., Newbery, R., Agyapong, D., & Matlay, H. (2018). Entrepreneurship in Africa, part 2: entrepreneurial education and eco-systems. *Journal of Small Business and Enterprise Development*, *25*(4), 550-553.

Knoema. (2019). Retrieved from https://knoema.ru/

Kulinich, O.A., & Zaretska, L.M. (2014). Education as a factor of social and economic development. *Economic strategy and prospects for the development of trade and services*, (1), 202.

Kuts, A., & Dolgushina, M. (2015), State policy in the field of higher education in modern conditions. Retrieved from http://sisupr.mrsu.ru/2015-4/PDF/Kuts_Dolgushina_Statya_1_1.pdf

Legatum institute. (2018). *The 2007-2017 Legatum Prosperity Index A Global Assessment of Wealth and Wellbeing*. Retrieved from https://prosperitysite.s3accelerate.amazonaws.com/3515/1187/1128/Legatum_Prosperity_Index_2017.pdf

Ling, V.V., & Yumashev, A.V. (2018). Estimation of worker encouragement system at industrial enterprise. *Espacios*, *39*(28), 22.

López-Bazo, E. (2003). Growth and convergence across economies. The experience of the European regions. *Regional Economic Growth, SMEs and the Wider Europe. Aldershot et al.: Ashgate*, 49-74.

Nelson, R.R., & Phelps, E.S. (1966). Investment in humans, technological diffusion, and economic growth. *The American economic review*, *56*(1/2), 69-75.

Nikolaenko, S.M. (2008). *Theoretical and methodological foundations of management of innovative development of the Ukrainian Education System: Monograph* (pp. 419). Kyiv National University of Trade and Economics.

Papagiannis, G.D. (2018). Entrepreneurship education programs: The contribution of courses, seminars and competitions to entrepreneurial activity decision and to entrepreneurial spirit and mindset of young people in Greece. *Journal of Entrepreneurship Education*, *21*(1), 1-21.

Polyakov, D.V., & Kravchenko, E.V. (2018). Entrepreneurial university: Structure and coordination. *Problems of Modern Economy*, *4*(68), 210.

Pudjiarti, E.S. (2018). Elements of entrepreneurship in private universities: Organizational change capacity, innovative capability and the performance. *Journal of Entrepreneurship Education*, *21*(2), 1-15.

Romer, P. (1990). Endogenous technological change. *Journal of Political Economy, 98*, S71-S102

Smirnov, D.A., Pavlov, V.P., & Trofimov, M.S. (2018). The legislative innovations in educational funding. *European Research Studies Journal*, *21*(4), 567-576.

Sun, P.K., Vorona-Slivinskaya, L., & Voskresenskay, E. (2017). Improvement of economic security management system of municipalities with account of transportation system development: methods of assessment. In *IOP Conference Series: Earth and Environmental Science* (Vol. 90, No. 1, p. 012073). IOP Publishing.

Tsindeliani, I.A. (2017). The modern system of russian financial law: conceptual approaches. In: Radva, M., Gliniecka, J., Sowinski, T., & Mrkyvka, P. (Eds.), *The financial law towards challenges of the XXI century : Conference proceedings. 1st editions* (pp. 529). Brno : Masaryk University.

Turner, T., & Gianiodis, P. (2017). Entrepreneurship unleashed: Understanding entrepreneurial education outside of the business school. *Journal of Small Business Management, 56*(1), 131-149.

Turner, T., & Gianiodis, P. (2018). Entrepreneurship unleashed: Understanding entrepreneurial education outside of the business school. *Journal of Small Business Management*, *56*(1), 131-149.

Welter, F., & Smallbone, D. (2011). *Handbook of research on entrepreneurship policies in central and eastern Europe*. Edward Elgar Publishing.

Zivitere, M., Riashchenko, V., & Markina, I. (2015). Teacher–Pedagogical creativity and developer promoter. *Procedia-Social and Behavioral Sciences*, *174*, 4068-4073.

Citation Information: Markina, I., Safonov, Y., Zhylinska, O., Gaidai, T., & Kahanov, Y. (2019). Entrepreneurship education management in the context of global changes in economy. *Journal of Entrepreneurship Education, 22*(6).