



Education as a Stimulating Factor for Entrepreneurship Development

SUMMARY

The main purpose of the paper is to present the role of education, particularly entrepreneurial education for entrepreneurship development. The paper is theoretical and includes both a literature review and two important world reports (Global Entrepreneurship Monitor and WEF Global Education Initiative) on entrepreneurship and entrepreneurial education. The problems discussed in the article embrace theoretical aspects of entrepreneurship and the entrepreneur, the approach to entrepreneurship, directions of research on entrepreneurship and the role of education in the entrepreneurial process and entrepreneurship development. It also presents international comparative studies of entrepreneurship with a focus on education factor in entrepreneurial process as well as selected research results on the impact of education on entrepreneurship.

→ **KEYWORDS** – ENTREPRENEURSHIP, ENTREPRENEUR, ENTREPRENEURSHIP
EDUCATION

STRESZCZENIE

Edukacja jako czynnik stymulujący rozwój przedsiębiorczości

Głównym celem artykułu jest zaprezentowanie roli edukacji, a w szczególności edukacji przedsiębiorczej w rozwoju przedsiębiorczości. Artykuł ma charakter teoretyczny i obejmuje przegląd literatury przedmiotu oraz dwóch najważniejszych raportów (Global Entrepreneurship Monitor oraz WEF Global Education Initiative) z zakresu przedsiębiorczości i edukacji przedsiębiorczej. Problemy poruszane w tekście obejmują teoretyczne aspekty przedsiębiorczości i przedsiębiorcy, podejścia do przedsiębiorczości, kierunki badań nad przedsiębiorczością oraz rolę edukacji w procesie przedsiębiorczości i rozwoju przedsiębiorczości. Ponadto w artykule przedstawione zostały międzynarodowe badania komparatystyczne przedsiębiorczości ze szczególnym uwzględnieniem

czynnika edukacji w procesie przedsiębiorczym oraz wybrane wyniki badań dotyczące wpływu edukacji na przedsiębiorczość. Tekst kończą wnioski podsumowujące.

→ **SŁOWA KLUCZOWE** – PRZEDSIĘBIORCZOŚĆ, PRZEDSIĘBIORCA,
EDUKACJA PRZEDSIĘBIORCZA

Introduction

Entrepreneurship researchers and economists generally agree that entrepreneurship and entrepreneurs contribute to economic growth and development. Following J. Schumpeter,¹ entrepreneurs are the driving force of economic development and they are endowed with the spirit of creative destruction. They destroy what is inefficient and outdated and run what is creative and new.

Entrepreneurial activity is shaped by a distinct set of factors. Among them entrepreneurship education plays a crucial role. Nowadays, when looking toward economic recovery in Polish and other European economies, it seems particularly important to stimulate entrepreneurship and thus to introduce entrepreneurship education at all levels of education. However, entrepreneurship education requires cooperation between universities, businesses, institutions and policy – makers.

Entrepreneurship and Entrepreneur

A unified theory of entrepreneurship, and even its definition have not yet been developed. This is due to the complexity, multi-faceted and multi-disciplinary nature of this phenomenon. In the literature entrepreneurship is most often treated two-dimensionally – as a feature and attitude as well as a process. Although it should be noted that one can find many detailed typologies or classifications of entrepreneurship.² The beginnings of the theory of entrepreneurship were developed in economics, hence attention has been focused on features of the entrepreneur. Later it

¹ Cf. J. Schumpeter, *Teoria rozwoju gospodarczego*, Warszawa 1960.

² Cf. N. Daszkiewicz, K. Wach, *Małe i średnie przedsiębiorstwa na rynkach międzynarodowych*, Kraków 2013, p. 78.

was undertaken in management sciences where the entrepreneurial process was at the center of attention.

Early concepts of the entrepreneur and its economic role were undertaken in the work of R. Cantillon, J. Schumpeter, I.M. Kirzner and J.B. Say. It is believed that J.B. Say was the first who defined entrepreneurship, describing it as the behavior of entrepreneurs that transfers economic resources from the lower to the higher areas of productivity, and thus increases their use and profit.³ In turn, R. Cantillon introduced differentiation between capitalists (owners of capital) and entrepreneurs (people who use the capital and see bargains on the market and take a risk).⁴

Subsequent attempts to define the entrepreneur and entrepreneurship generally refer to the above achievements. Despite the lack of a unified theory of entrepreneurship, researchers of this issue are generally agreed that entrepreneurship and the entrepreneur contribute to economic growth and development.

B. Piasecki (1998) grouped definitions of entrepreneurship and entrepreneurs into three basic categories that define contemporary research directions:

1. The earliest definitions that relate to the economic aspects of entrepreneurial activities in the economy (economic functions of the entrepreneur). The entrepreneur devotes his time and puts effort into creating new values (taking into account the risks and expecting satisfaction and financial benefits).
2. The definitions that relate to the personal characteristics of entrepreneurs. These characteristics emphasize the psychological and sociological aspects of entrepreneurship. For example A. Gibb refers to such characteristics as initiative, strong ability to persuade rather than high propensity for risk-taking, flexibility, creativity, independence, ability to solve problems, the need for achievement, imagination, high belief in the control of their own destiny, leadership, ability to work hard.⁵

³ Cf. A. Gawęł, *Ekonomiczne determinanty przedsiębiorczości*, Poznań 2007, p. 15.

⁴ Cf. F. Bławat, *Przedsiębiorca w teorii przedsiębiorczości i praktyce małych firm*, Gdańsk 2003, p. 18.

⁵ Cf. ibidem, p. 35.

3. Definitions treating entrepreneurship as a kind of managerial behavior (entrepreneurship is a way to manage). This approach is the essence of behaviorist theory of entrepreneurship based on the assumption that the entrepreneur must be defined “by something more than a set of individual characteristics and differs from the economic function.” In turn T. Veblen identified the entrepreneur with the manager, which gave rise to “managerial capitalism.”⁶

International Comparative Study of Entrepreneurship

GEM (*Global Entrepreneurship Monitor*) is the largest international project of entrepreneurship research and dissemination of knowledge about entrepreneurship. The initiative was established in 1997 jointly by Babson College in Boston and the London Business School.

The primary goal of GEM is to measure differences in the level of entrepreneurial activity between economies. GEM also focuses on the following objectives:

- to allow for comparisons with regard to the level and characteristics of entrepreneurial activity among different economies;
- to determine the extent to which entrepreneurial activity influences economic growth within individual economies;
- to identify factors which encourage and/or hinder entrepreneurial activity;
- to guide the formulation of effective and targeted policies aimed at stimulating entrepreneurship.⁷

The GEM population survey database includes nearly two million observations in 104 economies that have participated in GEM between 1999 and 2013 and has led to a growing body of academic, peer-reviewed research publications.⁸

GEM study is based on theoretical models of entrepreneurship developed on the basis of research results. GEM defines entrepreneurship as any serious attempt to create a new business or

⁶ Ibidem, p. 19.

⁷ Cf. J.E. Moros, N. Bosma, *Global Entrepreneurship Monitor 2013. Global Report*, 2013, London 2014, p. 17.

⁸ Cf. ibidem, p. 11.

expand an existing entity by an individual, a group or already acting company. While entrepreneurship is sometimes defined narrowly as a new economic activity, entrepreneurship in GEM is not limited to new businesses but is considered in a behavioral rather than an institutional sense. Entrepreneurship in the GEM includes both entrepreneurial activity at the time of starting a business and entrepreneurial activities undertaken in existing organizations.

The Conceptualization of the Entrepreneurial Process in the GEM

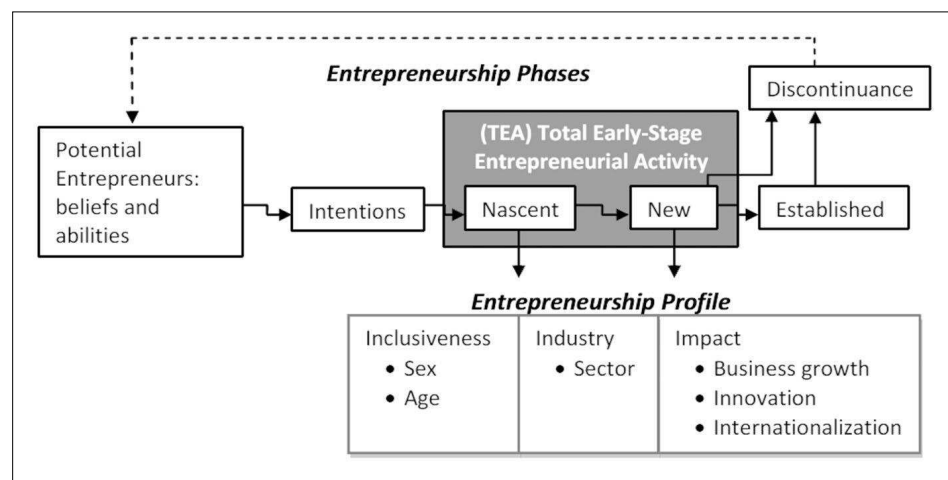
In the modeling of the entrepreneurial process, GEM distinguishes three stages of development of economic projects. Depending on the phase, entrepreneurs are divided into:

Nascent entrepreneurs – entrepreneurs who have not yet started operations, but intend to do so, and those who have already started their business, but they are in the early phase (up to 3 months of establishment).

New entrepreneurs – entrepreneurs who started a business from 3 to 42 months from the start of the study. A 3.5 year period was considered critical to their business.

Established enterprises – enterprises operating on the market for more than 42 months (figure 1).

Figure 1: Model of GEM entrepreneurial process



Source: D.J. Kelly, S. Singer, M. Herrington, *Global Entrepreneurship Monitor. 2011, Global Report* Global Entrepreneurship Research Association, London 2012, p. 5.

The GEM project has proposed that entrepreneurial activity is shaped by a distinct set of factors called Entrepreneurial Framework Conditions (EFCs). These EFCs are “the necessary oxygen of resources, incentives, markets and supporting institutions to the growth of new firms.”⁹ Table 1 includes the main nine EFCs. Entrepreneurship education is one of the key framework factors for entrepreneurial activity.

Table 1: GEM's key entrepreneurial framework conditions

1.	Entrepreneurial Finance. The availability of financial resources-equity and debt-for small and medium enterprises (SMEs) (including grants and subsidies).
2.	Government Policy. The extent to which public policies give support to entrepreneurship. This EFC has two components: 2a. Entrepreneurship as a relevant economic issue and 2b. Taxes or regulations are either size-neutral or encourage new and SMEs.
3.	Government Entrepreneurship Programs. The presence and quality of programs directly assisting SMEs at all levels of government (national, regional, municipal).
4.	Entrepreneurship Education. The extent to which training or managing SMEs is incorporated within the education and training systems at all levels. This EFC has two components: 4a) Entrepreneurship Education at basic school (primary and secondary) 4b) Entrepreneurship Education at post secondary levels (higher education such as vocational, college, business schools etc.).
5.	R&D Transfer. The extent to which national research and development will lead to new commercial opportunities and is available to SMEs.
6.	Commercial and Legal Infrastructure. The presence of property rights, commercial, accounting and other legal and assessment services and institutions that support or promote SMEs
7.	Entry Regulation. Contains two components: 7a. Market Dynamics: the level of change in markets from year to year, and 7b. Market Openness: the extent to which new firms are free to enter existing markets.
8.	Physical Infrastructure. Ease of access to physical resources-communication, utilities, transportation, land or space – at a price that does not discriminate against SMEs.
9.	Cultural and Social Norms. The extent to which social and cultural norms encourage or allow actions leading to new business methods or activities that can potentially increase personal wealth and income.

Source: J.E. Moros, N. Bosma, *Global Entrepreneurship Monitor 2013*, Global Report, op. cit., p. 44.

⁹ Ibidem, p. 44.

Education and Entrepreneurship

As K. Wach¹⁰ concludes, particular authors and institutions differently categorize education for entrepreneurship making a different delimitation between interdependent, and even interference areas of education. Within the framework of entrepreneurship education, which is undoubtedly the broadest and dominant concept, for example I. Jamieson distinguishes between *education about enterprise*, *education for enterprises* and *education in enterprise*.¹¹ Education about enterprise transmits theoretical knowledge about starting and running a business. Education for enterprises shapes the skills needed to entrepreneurs in running their own business, mainly managerial skills. In turn, education in enterprise refers to already existing entrepreneurs and helps them to develop further skills related to the development of their firms.

Another interesting proposal was presented by QAA (2012).¹² Education in the field of entrepreneurial ventures (enterprises education) is defined as a process of equipping students and/or graduates in a rich ability to generate ideas and development of skills necessary to implement these ideas. In turn, entrepreneurship education aims at preparing students in terms of knowledge, skills and attitudes required in the context of creating a new project or own business.¹³

Many authors have postulated a clear demarcation training in entrepreneurship from economic education. However, it is difficult because in management sciences entrepreneurial management

¹⁰ Cf. K. Wach, *Edukacja na rzecz przedsiębiorczości wobec współczesnych wyzwań cywilizacyjno-gospodarczych*, "Przedsiębiorczość – Edukacja" 2013, vol. 9, pp. 248,

¹¹ Cf. I. Jamieson, *Schools and Enterprise*, in: *Education for Enterprise*, eds. A.G. Watts, P. Moran, Cambridge, pp. 19-27, quoted in: K. Wach, *Edukacja na rzecz przedsiębiorczości wobec współczesnych wyzwań cywilizacyjno-gospodarczych*, op. cit., pp. 246-256.

¹² Cf. QAA, *Enterprise and Entrepreneurship Education. Guidance for UK Higher Education Providers. Draft for Consultations*, February 2012, quoted in: K. Wach, *Edukacja na rzecz przedsiębiorczości wobec współczesnych wyzwań cywilizacyjno-gospodarczych*, op. cit., pp. 246-256.

¹³ Cf. K. Wach, *Entrepreneurship Education in Poland*, "ERENET Profile" 2008, vol. III, no. 3 (11), pp. 36-44.

dominates. In turn, in economics the paradigm of entrepreneurial economy is deeply rooted.¹⁴

In turn, the GEM report focuses on the key areas in terms of what, how, where and who to teach entrepreneurship to maximize the learning of the participants¹⁵ (figure 2).

Figure 2. What to teach? How to teach? Who to teach? Where to teach?

What to teach?	How to teach?
<ul style="list-style-type: none"> • enhancing entrepreneurial, behaviours and mind-sets, • building self-confidence, and self-leadership, • creativity, innovation and ability to think "out of the box," to solve problems • managing complexity and unpredictability • basic business and financial skills "business literacy" • Opportunity identification • How to build, finance and grow ventures • Developing negotiations skills • Building relationships, networks and capital 	<ul style="list-style-type: none"> • interactive, learning centred pedagogies, • multi-disciplinary programs and projects, • case studies, games, simulations, business plan • competition, • extensive use of visuals, digital tools and multimedia, • learning by doing, • experiential learning/labs (trial & error), • projects, • mentoring and coaching, • interactions with entrepreneurs,
Students & Entrepreneurs	
<ul style="list-style-type: none"> • students, • teachers and school administrators, • professors, trainers, • business people and leaders in other sectors, • entrepreneurs, • mentors, coaches, advisors, 	<ul style="list-style-type: none"> • FORMAL SCHOOL SYSTEMS: <ul style="list-style-type: none"> – all the levels – across the disciplines – compulsory and elective courses • INFORMAL SYSTEMS: <ul style="list-style-type: none"> – local schools, training institutions, – community centres, NGOs, government agencies, banks, – workplace based training programs, – long-life learning
Who to teach?	Where to teach?

Source: J.E. Moros, N. Bosma, *Global Entrepreneurship Monitor 2013*, op. cit., p. 11.

¹⁴ Cf. K. Wach, *Europeizacja małych i średnich przedsiębiorstw. Rozwój poprzez umiędzynarodowienie*, Warszawa 2012, p. 200.

¹⁵ More see: K. Wach, *Kształtowanie postaw przedsiębiorczych w programach nauczania. Stan obecny i proponowane kierunki zmian*, in: *Kształtowanie postaw przedsiębiorczych a edukacja ekonomiczna*, eds. P. Wachowiak, M. Dąbrowski, B. Majewski, Warszawa 2007, pp. 120-127.

The review of the processes of creating new businesses made by I. Grilo and R. Thurik (2008) indicates that there is no consensus on the direction of the impact of education on the probability of being an entrepreneur.¹⁶ According to these scholars education matters in triggering at least the thought of starting a business even if the thought is later abandoned. However, results indicate that education of the owner has no impact on whether he owns a young or an older business suggesting that owners' education does not affect survival rates. Of the remaining determinate authors pointed to the following variables¹⁷:

- Sex – men are characterized by a higher probability of entry into entrepreneurship,
- Age – among starting new companies is dominated by people aged 25-34,
- Financial constraints – negatively influence the entrepreneurial process,
- Ability to take risks has a positive effect on the process of entrepreneurial,
- Perception of financial support or management complexity.

M.F. Iyigun and A.L. Main (1998) pointed out that the importance of education is different for professionals and entrepreneurs. Entrepreneurs gain more knowledge through practical action (learn by doing) and for professionals formal education is more important. Thus they accumulate their skills by investing time in schooling.¹⁸

In turn B. Honig and M. Samuelson (2012) studied 623 nascent entrepreneurs during a six-year-period. The scholars examined their planning behavior, particularly how their planning decisions impact venture level performance. They found that neither formal planning nor changes in their business plan increased venture level performance. However, the authors noted that while courses in entrepreneurship are both popular and ubiquitous, pedagogical assessments related to entrepreneurship

¹⁶ Cf. I. Grilo, R. Thurik, *Determinants of Entrepreneurial Engagement Levels in Europe and the US*, "Industrial and Corporate Change" 2008, vol. 17, no. 6, pp. 1113-1145, quoted in: A. Gawęł, *Proces przedsiębiorczy. Tworzenie nowych przedsiębiorstw*, Warszawa 2013, p. 82.

¹⁷ Cf. ibidem.

¹⁸ Cf. M.F. Iyigun, A.L. Owen, Risk, *Entrepreneurship and Human – Capital Accumulation*, "The American Economic Review" 2012, vol. 88, no. 2, pp. 454-457.

are quite scarce. Moreover, there is little agreement concerning common course content. When doing research, the authors observed that most of entrepreneurship courses rely on business plans. Thus understanding the impact of business planning on entrepreneurial performance should be particularly important.¹⁹

In the literature one can also find the results of studies showing that higher levels of education reduces the probability of starting own business. This is because a higher level of education increases a person's competence and thus improves his/her situation on the labor market.²⁰

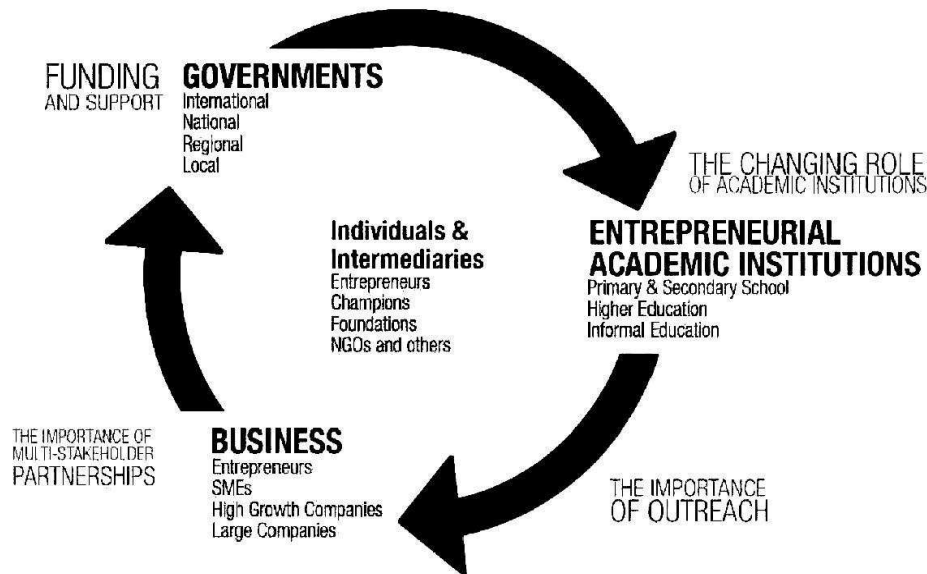
In spite of the fact that research results lead to different conclusions, entrepreneurial education is without a doubt important and a frequently discussed problem. Foremost, it is considered to be essential for developing the human capital. According to the WEF Report on Entrepreneurship Education (2009) entrepreneurship should be the core to the way education operates. Educational institutions at all levels need to adopt modern methods and tools to develop the appropriate learning environment. Entrepreneurship education requires cooperation between universities and businesses. Thus barriers to academic collaboration with business need to be broken down. What is more, businesses foster an entrepreneurial culture and contribute directly to the entrepreneurial education process by providing employees with the opportunity to cultivate entrepreneurial skills. In turn, policy-makers at the international, national, regional and local levels should play an important roles in setting the appropriate legal and fiscal frameworks to encourage entrepreneurship. The role of higher education institutions is critical. Universities are perceived as intellectual hubs in entrepreneurial ecosystems; an incubator for innovation and research as well as a focal point for collaboration among researchers, students, professors, companies and entrepreneurs. Also foundations, NGOs and other organizations can play an important role²¹ (figure 3).

¹⁹ Cf. B. Honig, M. Samuelson, *Planning and Entrepreneurs: A Longitudinal Examination of Nascent Entrepreneurs in Sweden*, "Journal of Small Business Management" 2012, vol. 50, no. 3, pp. 365-388.

²⁰ Cf. E. Johansson, *Self-employment and Liquidity Constraints: Evidence from Finland*, "The Scandinavian Journal of Economics" 2000, vol. 102, issue 1, pp. 123-134.

²¹ Cf. World Economic Forum, *Educating the Next Wave of Entrepreneurs. Unlocking entrepreneurial capabilities to meet the global challenges of the*

Figure 3: Education in the entrepreneurial ecosysytem



Source: Educating the next wave of entrepreneurs. Unlocking entrepreneurial capabilities to meet the global challenges of 21st Century, World Economic Forum, *Educating the Next Wave of Entrepreneurs. Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century*, 2009, p. 8.

Conclusions

Entrepreneurship is a complex and multidiscipline phenomenon, which has been the topic of interests for both scientists and international projects of entrepreneurship research. There are many definition and detailed typologies or classifications of entrepreneurship. Also factors shaping entrepreneurship have been widely recognized. There is no doubt that entrepreneurship education is one of the key framework factor for entrepreneurial activity. This is clearly indicated in presented in this paper GEM international project and WEF Report on Entrepreneurship Education. Research results lead to different conclusions about the role of education, particularly entrepreneurial education in entrepreneurship development and entrepreneurial process. In spite of that, in the light of the literature review, entrepreneurship should be included in education at all education

levels. Educational institutions at all levels need to adopt modern methods and tools to develop the appropriate learning environment. Further research should on one hand focus on collaboration among researchers, businesses, entrepreneurs and policy makers but also on the content of courses of entrepreneurship.

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