ARE ENTREPRENEURS BORN OR MADE?
EFFECTIVE ACADEMIC MODELS TO FOSTER ENTREPRENEURIAL GRADUATES

I. L. Pluzhnik¹, T. O. Ilnitskaya²
University of Tyumen, Tyumen, Russia.
E-mail: ¹i.l.pluzhnik@utmn.ru; ²t.o.ilnickaya@utmn.ru

Florence Lucci
Quinsigamond Community College, Worcester, Massachusetts, USA.
E-mail: florencelucci@gmail.com

Abstract. Introduction. Professional training of the people possessing a wide range of entrepreneurial competencies is becoming an imperative in the conditions of a post-industrial society development characterized by a focus on innovation, priority of knowledge, a high level of competition and involvement of a big proportion of population in service industries. Universities are charged to play a key role in developing highly qualified specialists with an extensive creative and intellectual potential capable of implementing various business projects and becoming a driving force of a sustainable economic growth in their countries. Therefore, there is a big interest in practices of developing graduates’ entrepreneurial culture and literacy established in universities of developed countries.

Aim. The article is aimed at systematizing the existing experience of the US and UK universities in delivering entrepreneurship education based on academic models as well as considering a possibility of adapting the most efficient conceptions, teaching approaches and techniques within the Russian higher education system.

Methodology and research methods. The methods include a qualitative analysis of the concepts “entrepreneurship education” and “entrepreneurial competencies”. A case study method was used for describing the academic models applied for teaching entrepreneurship in different universities.

Results and scientific novelty. The processes and outcomes of entrepreneurship training in the US and UK higher educational institutions were characterized and compared. The paper provides the description of the academic models applied at the leading universities for providing business education. They integra-
te the elements of experiential learning, multidisciplinary, multicultural, interactive, learner-centered teaching approaches to developing entrepreneurial behavior patterns, key and variable competencies and “soft” skills.

The paper reveals the problems and drawbacks of entrepreneurship education delivery within the Russian higher education: a discrepancy between the competencies fixed in university curricula and the ones actually needed; an inadequacy of teaching methods and absence of consistency in the course of students’ acquisition of theoretical knowledge and practical skills for efficient entrepreneurship activity.

Practical significance. The recommendations for improving entrepreneurship education in the Russian higher education system were proposed. The authors grounded a need for implementing an academic model of experiential learning, which enables graduates to develop entrepreneurial competencies and acquire a system of knowledge in the field of entrepreneurship.

Keywords: entrepreneurship education, entrepreneurial competencies, university, academic models.

Acknowledgements. The authors would like to thank the reviewers for their comments and suggestions that contributed to development of this article.

тельских компетенций и способных стать движущей силой устойчивого экономического роста в своей стране. Центральная роль в решении данной задачи отводится университетам, чья миссия заключается в обеспечении экономики знаний высококвалифицированными кадрами, обладающими значительным творческим и интеллектуальным потенциалом, необходимым, в частности, для осуществления различных бизнес-проектов. В связи с этим большой интерес вызывает сложившаяся в развитых странах практика формирования предпринимательской культуры и грамотности у выпускников высших учебных заведений.

Цель статьи – систематизация имеющегося в университетах США и Великобритании опыта организации предпринимательского образования, реализуемого на основе академических моделей, и поиск возможностей адаптации к российским реалиям наиболее перспективных концепций, технологий и продуктивных приемов обучения.

Методы и методики. В работе использовались методы сравнительного анализа и качественного анализа семантики понятий «предпринимательское образование» и «предпринимательские компетенции». Академические модели обучения предпринимательству в различных университетах рассматривались на основе метода «кейс-стади».

Результаты и научная новизна. Охарактеризованы и сопоставлены процессы и результаты обсуждаемого вида подготовки в американской и английской высшей школе. Описаны применяемые в ведущих университетах модели бизнес-образования, интегрирующие элементы междисциплинарного, практико-ориентированного, интерактивного, мультимедийного, и личностно-центрированных подходов к формированию образцов (паттернов) предпринимательского поведения, ключевых и вариативных предпринимательских компетенций и «мягких» умений.

Вскрыты существующие в настоящее время проблемы и недостатки обучения предпринимательству в российских вузах: несоответствие между фиксированными в учебных планах и востребованными на деле компетенциями, слабая разработанность методик и отсутствие системности в процессе овладения студентами теорией и практическими навыками эффективной предпринимательской деятельности.

Практическая значимость. Предложены рекомендации по совершенствованию предпринимательского образования в российской высшей школе. Обоснована необходимость внедрения практико-ориентированной модели профессиональной подготовки, позволяющей выпускникам вузов получить целостные, системные знания в сфере предпринимательства.

Ключевые слова: предпринимательское образование, предпринимательские компетенции, университет, академические модели.

Благодарности. Авторы выражают признательность экспертам журнала за объективный анализ содержания статьи и рекомендации по поводу повышения ее содержательности.
Introduction

There is a growing interest in entrepreneurship education on the part of universities and scientific educational community. The need to develop entrepreneurship education within universities and conduct research into this area can be explained by a growing demand for people who possess a high level of entrepreneurial culture and a specific set of entrepreneurship competencies. These people are the key factor for developing entrepreneurial economies based on competitiveness, innovation and creativity. Only such economies can make it possible to increase the social and economic well-being of people and provide a sustainable development for countries.

According to the Report on developing entrepreneurial graduates in the UK higher educational institutions prepared by the experts in the field of education and business “universities and other higher educational institutions are ideally charged to expose students to environments which foster entrepreneurial mindsets, behaviors and capabilities to deal with an increasingly complex and uncertain world” [1, p. 10].

The experts of the Kauffman Foundation (US), which deals with supporting entrepreneurship education, confirm that “entrepreneurship is higher education’s authentic and natural ally” [2, p. 2]. The UNESCO World Conference recognized its value and advocated cultivating entrepreneurship and skills in higher education1. The need for fostering younger generation’s entrepreneurial competencies is grounded in “The Federal Targeted Program for Russia’ Education Development until 2020”, which includes a provision about involving young people in entrepreneurship activity2.

The participants of the recent annual international scientific conference under the name “Current Entrepreneurship Education”, which was held in Moscow in March 2018, emphasized the role of higher educational institutions in training potential entrepreneurs and people possessing entrepreneurial competencies [3–5].

---

Thus, we can make a conclusion about a unanimous agreement on the part of national governments, international organizations, educational and business communities and non-governmental foundations on the role played by universities in providing entrepreneurship education and training entrepreneurial graduates.

In this paper, we will look at the models of entrepreneurship education at the US and the UK universities and identify the methods and techniques applied when teaching students entrepreneurial competencies. In addition, we will outline a set of recommendations for developing entrepreneurship education in Russia’s higher educational institutions.

The focus on the specifics of entrepreneurship education in American and British universities can be explained by the two facts: 1) it has been included into the curricula of higher educational institutions since 1948 when the first course in entrepreneurship was introduced at Harvard University by Prof. Miles Mace [6]; 2) “in the US entrepreneurship has historically been a key driver of economic growth” [6, p. 2].

Thus, the USA has the widest and most various experience of developing entrepreneurship education at universities, which can be interesting for studying and applying in higher educational institutions of different countries including Russia.

As for the development of entrepreneurship education in British universities it is not as historically old as in the US. However, in our opinion, the approach to training entrepreneurial graduates used in British universities is effective and worth researching and implementing.

Despite an increasing interest in the subject of developing entrepreneurship education within Russian higher educational institutions and a big number of publications in this area, there is little research done by Russian scientists related to entrepreneurship education in the US and the UK universities. Most publications in Russian scientific journals consider foreign universities’ entrepreneurship education from the economic point of point. They provide an analysis of foreign universities experience in developing an entrepreneurship environment [7]; describe a university as a driver of regional or national economic development [8] or focus on specifics of entrepreneurship education within technical universities [9].

We argue that entrepreneurship education is not only about business and economy. An entrepreneurial graduate being a final product of entrepreneurship education should possess a wide set of skills, competencies and capabilities ranging from specific business and entrepreneurship-related ones to so called “soft” skills, which are not of lesser importance than the former.
The second point we make is that the application of effective approaches, methods and techniques will result in students’ acquisition of entrepreneurship competencies. The emphasis should be made not only on what to teach; but also on how to teach. Thus, a high level entrepreneurship education should be based on a well-structured academic model comprising teaching approaches, methods and techniques to be used and a set of competencies to be developed. In order to prove our hypothesis, we are going to consider the process of developing entrepreneurial university graduates from the pedagogical point of view. We will focus on competencies and skills needed by entrepreneurial graduates and approaches and methods used to develop them. By entrepreneurial graduates we mean all students involved in entrepreneurship education irrespective of their major. They will not necessarily become entrepreneurs and open their own businesses. But, they will possess a set of skills and competencies which will enable them to reveal their creative, intellectual and enterprising potential to the maximum effect regardless of their postgraduate employment. In respect to this view, our opinion coincides with that of Heidi M. Neck and Andrew C. Corbett, who said that entrepreneurship education equips learners with important life skills which will enable them to live productive lives even if they do not start their own business [10].

**Literature Review**

The key concepts within our research are those of “entrepreneurship education” and “entrepreneurial competencies”. As the focus of our research is entrepreneurship education in the US and UK universities, we did not choose to review articles on entrepreneurship education published in Russian academic journals. Moreover, it was problematic to find clear definitions for entrepreneurship education and entrepreneurial competencies as entrepreneurship education is currently being piloted in Russian universities and entrepreneurial competencies are still in the phase of development. Instead, we focused on the definitions of these two concepts provided in foreign research articles.

In the review of literature on entrepreneurship education, Mwasalwiba defines entrepreneurship education as an educational process designed to influence individuals’ behavior, values or intention to be involved in entrepreneurship [11]. The same view is shared by Colombo and Grilli [12] and Nuthall [13]. Hytti and Kuopusjärvi emphasize the distinction between the two characteristics attributed to students involved in entrepreneurship education, namely being enterprising and entrepreneurial [14]. We agree with this division, but it is not a highlight of this article.
The European Commission in its report identified a set of entrepreneurship skills, capabilities and competencies and concluded that entrepreneurship education enables students to be “... more creative/innovative; highly motivated; proactive; self-aware; self-confident; willing to challenge; better communicators; decision-makers; leaders; negotiators; networkers; problem solvers; team players; systematic thinkers; less dependent; less risk averse; able to live with uncertainty; capable of recognizing opportunities” [15, p. 10]. Entrepreneurship education as defined by Jane Chang and Alison Rieple “aims to develop students’ mindsets, behaviors, skills and capabilities, which will create the entrepreneurs of the future and does not extend to be demanded in other professional spheres except entrepreneurial activity [16, p. 226]. Their opinion coincides with that of Fayolle, who identifies the same components and the same purpose for entrepreneurship education [17].

The definition of entrepreneurship education, which is closest to our understanding and fits the framework of this research, is given by Heidi M. Neck and Andrew C. who consider entrepreneurial skills to be life skills for the 21st century [10]. The report prepared for the OECD Ministerial Conference on Small and Medium-sized Enterprises, which took place on 22–23 February 2018 in Mexico, includes “creativity, a sense of initiative, problem-solving, the ability to marshal resources, and financial and technological knowledge” into the list of entrepreneurial competencies. These competencies are developed through entrepreneurship education and demanded not only by entrepreneurs, but also by “entrepreneurial employees”, which constitutes our position on entrepreneurship education [18, p. 3].

In addition to analyzing recent publications on entrepreneurship education in peer-reviewed journals, we studied the reports prepared by the Panel members of the Kaufmann Foundation (US) and the leading experts of educational and business communities (UK). We believe they contain essential guidelines for developing entrepreneurship education in higher educational institutions.


The report emphasizes the interdisciplinary nature of entrepreneurship education and the importance of integrating it into various disciplines in curricula. “Entrepreneurship naturally and authentically draws together subjects usually taught and studied separately” and provides conditions for “studying how cultural values, social institutions, economic policies, and legal practices interrelate to shape human behavior” [2, p. 10].

Confirming the direct relevance of entrepreneurship to studies in business and economics, the authors of the report suggest integrating entrepreneurship education into humanities and social sciences as well as other disciplines.
An important point the authors make is the need for developing innovative curricula. According to the report, “curriculum is the basic enterprise of education” [2, p. 14]. This asks for entrepreneurial faculty willingness and ability to train entrepreneurial students.

The “Developing Entrepreneurial Graduates” Report (UK) [1].

The experts define entrepreneurship education as “a process which develops individuals’ mindsets, behaviors, skills and capabilities. These can be applied to create value in a range of contexts and environments from the public sector, non-profits, universities and social enterprises to corporate organizations and new venture start-ups” [1, p. 12]. Further, they identify a set of principles for developing entrepreneurship education in higher educational institutions. They include:

1) “the need for an enabling institutional environment;
2) the engagement of key stakeholders within and outside the institution;
3) the development of entrepreneurial pedagogic approaches in teaching, learning and support practices” [1, p. 14].

As our interest lies in pedagogical aspects of entrepreneurship education, we will focus on the third principle.

Fostering entrepreneurial culture, which comprises the development of competencies, mindsets, attitudes, beliefs and personal values, asks for the use of innovative pedagogies. The features of the innovative pedagogies include:

● using a learning model centered around the experience, action and reflective practices;
● embedding the situations from the world of business into the educational process;
● applying a multidisciplinary approach to forming entrepreneurial culture;
● increasing the role of self-directed learning;
● applying practice-oriented teaching techniques aimed at developing general employability skills (critical thinking, team-working, communication skills, etc.) [1].

The teaching methodology used within the implementation of entrepreneurship education comprises project-based learning (PBL), task-based instruction (TBI) and role-plays.

According to the report, the application of the above-mentioned teaching approaches, methods and techniques will facilitate fostering entrepreneurial students who will possess a range of entrepreneurial competencies included in Table 1 (adapted from [1, pp. 31–33]).
Table 1

Overall system of targeted entrepreneurial competencies

<table>
<thead>
<tr>
<th>Key entrepreneurial skills</th>
<th>Generic entrepreneurship “soft” skills</th>
<th>Behavioral patterns</th>
<th>Key entrepreneurial values</th>
<th>Key business practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>● opportunity seeking;</td>
<td>● learning from relationships;</td>
<td>● living with uncertainty and complexity;</td>
<td>● strong sense of independence;</td>
<td>● seeing products and services as combinations of benefits;</td>
</tr>
<tr>
<td>● initiative-taking;</td>
<td>● improving emotional self-awareness;</td>
<td>● having to do everything under pressure;</td>
<td>● distrust of bureaucracy and its values;</td>
<td>● developing a total service package;</td>
</tr>
<tr>
<td>● strategic thinking;</td>
<td>● emotional intelligence capacity;</td>
<td>● exposure to working autonomously;</td>
<td>● self-made/self-confidence;</td>
<td>● pricing a product service;</td>
</tr>
<tr>
<td>● negotiation capacity;</td>
<td>● finding an idea;</td>
<td>● holistic management;</td>
<td>● strong sense of ownership;</td>
<td>● identifying and approaching good customers;</td>
</tr>
<tr>
<td>● selling capacity;</td>
<td>● seeing problems as opportunities</td>
<td>● working flexibly and long hours</td>
<td>● strong action orientation;</td>
<td>● appraising and learning from competition</td>
</tr>
<tr>
<td>● achievement orientation;</td>
<td></td>
<td></td>
<td>● belief in the individual and community, not the state</td>
<td>● developing a business plan as a relationship communication instrument</td>
</tr>
<tr>
<td>● decision-making with limited information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In our research, we stick to the definition of competence given by I. Pluzhnik, who considers it an integrative complex phenomenon which includes a single entity of skills, behavioral patterns, values and situations of professional context a person has to operate in. The table below represents a detailed description of all these components of competences specific for entrepreneurship education.

Materials and Methods

The object of our research is entrepreneurship education in American and British universities. We aimed our research at identifying academic mo-
models applied by American and British universities for developing students’ entrepreneurial competencies. Within the models, we focused on methods and techniques used and skills and competencies developed.

The research is based on studying various sources ranging from scientific papers published in peer-reviewed journals to reports prepared by the US and UK experts in the field of education and business.

At the initial stage we applied the method of semantic analysis for revealing the content of the key concepts of our research, such as entrepreneurship education and entrepreneurial competencies.

The next stage of research consisted in selecting examples of effective practices within entrepreneurship education in the US and UK universities. By means of scientific analysis, synthesis and generalization, we identified the academic models and conducted their comparative analysis.

As the main tool of our research we chose the method of case study, which has proved to be “an effective methodology to investigate and understand complex issues in real world settings” [19]. We analyzed the selected cases related to teaching entrepreneurship with a view of identifying general principles [20] such as defining the academic model of entrepreneurship education and specifying the teaching methods and students’ competencies included into the applied model. The comparison of the three cases allowed us to conclude on the most effective approaches to teaching entrepreneurship in higher educational institutions of the US and UK and outline recommendations for developing students’ entrepreneurial competencies within Russia’s university context.

### Results and Discussion

**The University of Massachusetts (US) case study [21].**

The global entrepreneurship education program was launched during the winter of 2014 by the Business School of a leading US public university – the University of Massachusetts – Lowell jointly with BVB College of Engineering & Technology in Hubli, India. The group of 117 undergraduate, graduate and post-graduate students from six countries with different cultural and educational backgrounds was involved in entrepreneurship learning through an intensive two-week program.

The program consisted of multiple stages. During the summer of 2014 and the winter of 2015, there were exchange visits between the Indian and American students. In the summer of 2015, the program was expanded to some other countries and involved students from Japan, China, Thailand and Guyana. Participating student majors included Business, Medicine, and Engineering. The program can be characterized as inter-disciplinary, multi-cultural, multi-level and experiential.
The student-centered interactive framework was chosen for organizing the process of learning the principles of innovation and entrepreneurship as well as marketing, financing and the business model. In this learning environment, the teacher's role was that of “a guide and a facilitator” [21, p. 125]. The classes included discussions, case studies, group work and brainstorming sessions.

A big advantage of the program was students’ work on technology commercialization projects, such as water purification, home automation, plant disease identification and service robots. The project-based learning took place both inside and outside of class with students “researching, analyzing data, discussing the project, sharing ideas and having fun” [21, p. 126].

Finally, students presented their projects, which demonstrated that “they not only grasped the basics of entrepreneurship; but also learned how to work in teams and communicate in a team environment comprised of members from a variety of functional backgrounds” [21, p. 126].

Involvement of guest speakers, field visits to technological companies, business incubators, social organizations, and cultural sites created a real entrepreneurship environment throughout the program duration. The multicultural component of the program facilitated developing students’ cross-cultural sensitivity as well as strengthening their social and team-work skills. The multi-cultural and inter-disciplinary character of the program simulated a real-world business and workplace environment.

From the detailed description of the program provided by the authors, we can conclude that students benefited greatly, not only in terms of business related knowledge acquisition, but also from the point of view of special entrepreneurship and general employability skills development.

The University of York (UK) case study [22].

The article describes the interdisciplinary Master of Science Engineering Management Program introduced in the University of York (UK), the Department of Electronics in 2010. The program is aimed at training entrepreneurs “who are the smart innovators actively involved in the design and creation of new products, ventures and business models” [22, p. 2]. According to the authors the role of entrepreneurs lies not only in creating new business ventures, but also in developing new products, technologies and administrative strategies.

The aim of the program is to “allow technically qualified students to develop their engineering management knowledge and skills within a technical context and with a specialist management emphasis” [22, p. 3]. As the students enrolled in the program did not have any management studies backgro-
The emphasis was made on teaching them generic entrepreneurship skills. They comprise creativity, innovation, problem solving, communication, teamwork and interpersonal skills, “which are an important part of entrepreneurship and entrepreneurship effectiveness” [22, p. 3].

The curriculum included lectures and workshops as well as project work. Students participated in group projects which required them “to propose a technical and business solution to a substantial real engineering problem” [22, p. 3]. Additionally, students were supposed to do some independent work by studying materials available on the university web pages and filling in an e-learning log for personal reflection.

The learning process comprised of case studies as well as group projects can be characterized as active and experiential. Students were exposed to situations related to the real world of engineering. The combination of multidisciplinary approach and mixed learning strategies resulted in students’ acquisition of entrepreneurial awareness, mindset and competencies. A variety of business modules students studied through, examples such as Management and Marketing of Technology, Accounting and Finance, Enterprise of Business equipped students with necessary business-related knowledge and skills. All this could enable students to choose a career of an entrepreneur and/or chose to become an efficient entrepreneur [22].

The popularity of the program is confirmed by the fact that it attracts students from all over the world. Another proof of the program efficiency is the interviews with alumni who “highlighted the importance of being entrepreneurial in the current competitive environment” [22, p. 5].

We agree with the authors who conclude that the need for such type of interdisciplinary entrepreneurship program is increasing in the current conditions of a growing demand for creative entrepreneurs and inventive engineers.

*The Babson College case study (US)* [23].

The hands-on, action-oriented prototyping approach to teaching entrepreneurship was successfully applied at Babson College, which is famous for its cutting-edge innovations in entrepreneurship education. The emphasis is made on the value of prototyping in opportunity identification and opportunity evaluation, which are the key entrepreneurial competencies.

The author defines prototyping as “the process of quickly putting together working models (i.e., prototypes) to represent ideas, test various aspects of a design, and gather early customer feedback” [23, p. 119]. The target audience feedback enables entrepreneurs to decide what product or service concept to develop.
Students were offered the task of prototyping concepts to cope with an urgent real-life challenge. This project dealt with the public health challenge of vitamin D deficiency in youth. The Prototype-It Challenge activity, which can be described as interactive and hands-on, consisted of several stages. At the stage of introduction students were familiarized with the prototyping process. They were given information about a public challenge and the target audience (10- to 12-year-old children). Then, students were divided into teams and provided with materials, such as paper, scissors, markers, glue. The students were supposed to create prototypes within 30 minutes. After completing some prototype building representatives from each group made brief presentations of their concepts. The next stage included watching the “Experts Kids Panel” video which contained the target customers’ feedback on a range of prototypes. It encouraged students to reflect on their prototypes and identify “drivers of value creation and destroyers of value creation for the target customer” [23, p. 121]. Despite a short length of this activity (75–90 minutes), it proves to be highly effective in terms of developing students’ entrepreneurship competencies which can be transferred to another environment.

The experiential learning model this activity refers to is based on learners’ direct experience and action as well as reflection and peer evaluation. It facilitates the development of students’ creativity, problem solving and teamwork skills. The author emphasizes the following benefits of experiential learning: “experience-acquisition, ... which serves as a context for future action, reflection, the demonstration of agency by the learner ... due to the need to make a choice and act in the face of ambiguity, the internalization of learning through the process of reflection, the generalization of experiences and learning to other contexts and challenges” [23, p. 128]. Another advantage of experiential learning and the Prototype-It Challenge activity is its mirroring real life problems and the real world of entrepreneurship challenges, which makes the learning process meaningful and motivating for students.

From a comparative analysis of the described cases we can conclude that the most widely used academic model for entrepreneurship education is the experiential learning model, which was developed by D. Kolb, an American educational theorist. Kolb stated that “learning is the process whereby knowledge is created through the transformation of experience” [24, p. 38]. The proper choice of teaching methods and techniques allows learners to get knowledge and develop skills through active experiencing real-world situations. Additionally, experiential learning enables students to reveal their intellectual and creative potential.
It is evident from the analyzed cases that a variety of methods and techniques, among which are project-based learning, team work, case studies, reflection practice, prove to be effective for developing students’ specific entrepreneurship competencies (opportunity identification, opportunity evaluation) as well as general employability skills (21st century skills of creativity, collaboration, communication and critical thinking) [25]. If we look back at the findings in the report on developing entrepreneurial graduates, we will notice a direct correlation between students’ competencies and teaching methodology presented in the report and their analogues from Table 2, which summarizes the results of the comparative analysis conducted by the authors.

We strongly believe that the successful teaching of entrepreneurship consists of aligning learning objectives (competencies to be developed) and instructional strategies (activities to be used). As can be seen from the cases studied the competencies students should acquire in the course of entrepreneurship education are clearly defined. The US and UK universities provide entrepreneurship education basing on an academic model which presents an integral system of the following components:

1) teaching approaches;
2) methods and techniques;
3) competences and skills.

The model proves to be effective if all its components are properly correlated, i.e. teaching methods and techniques fit the chosen approach and can effectively attain the expected outcomes in terms of learners’ competencies and skills.

In recent years there has been a big discussion of the issues of standards for entrepreneurship education at the national academic level and within universities. The University of Tyumen is getting involved in delivering entrepreneurship education to students of different academic directions and specialties. When studying the curriculum for the discipline “Fundamentals of Entrepreneurship”, which is obligatorily taught to all students at the University of Tyumen, we found out that the wording of competencies, students should develop, are distantly related to entrepreneurship. According to the curriculum of “Fundamentals of Entrepreneurship” for students majoring in Pedagogy (Arts, Music Education), the key competence is defined as “an ability to use systematized theoretical and practical knowledge of Humanities, Social and Economic sciences for solving social and professional tasks” [26, p. 5]. Students of Management and Robotics should develop the same-worded competence after completing the course of Fundamentals of Entreprene-
A fear to use the basics of economic and legal knowledge in different spheres of activity” [27, p. 6; 28, p. 5].

Table 2

<table>
<thead>
<tr>
<th>Academic models in Anglo-Saxon entrepreneurship education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic model</strong></td>
</tr>
<tr>
<td><strong>Teaching approach</strong></td>
</tr>
<tr>
<td><strong>Teaching methods and techniques</strong></td>
</tr>
<tr>
<td><strong>Learners’ competencies</strong></td>
</tr>
</tbody>
</table>

As we can see, all these competencies have little to do with entrepreneurship, although the content of the curriculum is related to business and entrepreneurship aspects. When comparing the list of competencies needed by entrepreneurial graduates in Table 1 and a single competence included into
the curriculum within the course of Fundamentals of Entrepreneurship we distinctly can see an absence of all those competencies which can develop entrepreneurial students. As the teaching process within the Russian higher education system is competence-based, the clear and detailed identification of key learners’ competencies to be developed is of primary importance.

We do not call for mechanical copying of experience of teaching entrepreneurship accumulated in foreign universities, but would like to outline some recommendations on how to foster entrepreneurial students within Russian higher education based on the results of our research. They are as follows:

- developing an effective and well-structured academic model for entrepreneurship education;
- threading entrepreneurship education components across various disciplines by means of case studies, role plays, project-based learning, experiential learning;
- expanding interdisciplinary links based on the application of special pedagogical techniques within students’ academic and extra-curricular activity (development of joint courses and electives, holding contests of business plans, conferences on entrepreneurship, arranging meetings with representatives of business community, field visits to companies, business incubators);
- using an extensive potential of Humanities (developing skills of communication, collaboration, team-working, revealing students’ creative potential).

We do realize the challenges facing the universities and the faculty related to implementation of entrepreneurship education: a lack of resources, official requirements for syllabus development to be followed, resistance on the part of some faculty members and students more comfortable with teacher-centered learning model. However, it is up to the faculty to try to be “enterprising”. Only such kind of faculty can develop entrepreneurial students.

**Conclusion**

When teaching entrepreneurship, we deal not only with specific knowledge and skills related to business, management and finance. A much wider range of competencies can be developed through special teaching approaches, methods and techniques and will result in fostering entrepreneurial students. Entrepreneurial graduates will have plenty of opportunities for their professional self-actualization whether they will become successful entrepreneurs or creative employees in a company, a government organization or an educational institution. The competencies they will be equipped with during entrepreneurship education will enable them to realize their professional and personal potential to the maximum effect.
Entrepreneurship education is not a tribute to fashionable trends, but an imperative of the current economic and social conditions both on global and national levels. Nowadays, universities throughout the world are taking great effort to enhance entrepreneurship education by means of developing effective entrepreneurship curricula, embedding entrepreneurship education across disciplines, establishing links with business community and setting up business incubators.

The analyzed cases reflect valuable experience of the US and UK universities in providing entrepreneurship education. Practices of many other foreign higher educational institutions are worth studying and disseminating for further analysis.

Currently Russian universities are getting engaged in scientific research into different aspects of entrepreneurship education and practical projects aimed at developing entrepreneurial graduates. However, there is a lot of work to be done in this direction. There is an urgent need for developing entrepreneurship programs which integrate courses and innovative approaches to teaching entrepreneurship and are geared for specifically trained faculty who will deliver entrepreneurship education. The main condition for effectiveness of entrepreneurship education is its reliance on a well-designed academic model. First and foremost, we need to come to understanding that entrepreneurship education is not limited with specific business knowledge and skills but comprising a wide range of competencies, behaviors and capabilities and can “be applied to create value in a range of contexts and environments from the public sector, non-profits, universities and social enterprises to corporate organizations and new venture start-ups” [1, p. 12].

Although we do not deny that talented entrepreneurs can be born, we tend to agree with Peter Drucker, one of the leading management thinkers of the 21st century, who said: “Entrepreneurship is not magic, it is not mysterious and it has nothing to do with genes. It is a discipline. And, like any discipline, it can be learned” [29, p. 18].

References


Список использованных источников


9. Коротков А. В., Фонотов А. Г. Сравнительный анализ предпринимательского образования в технических университетах России и США // Образование и инновации. 2015. № 10 (204). С. 58–76.


Information about the authors:
Irina L. Pluzhnik – Doctor of Pedagogical Sciences, Professor, Head of Foreign Languages and Intercultural Communications Department for Law and Economics, University of Tyumen, Tyumen, Russia. E-mail: i.l.pluzhnik@utmn.ru
Tatyana O. Ilnitskaya – Senior Lecturer, Foreign Languages and Intercultural Communications Department for Law and Economics, Master of Economics, University of Tyumen, Tyumen, Russia. E-mail: t.o.ilnickaya@utmn.ru
Florence Lucci – Doctor of Business Administration (D.B.A), Professor of Management/Marketing at Quinsigamond Community College in Worcester, Massachusetts, USA. Visiting Fulbright Scholar to Tyumen State University, spring of 2018. E-mail: flucci@qcc.mass.edu
Contribution of the authors:

Irina L. Pluzhnik worked out theoretical concept of the article and methodological rationale for entrepreneurial higher education models' constituents in Russia, the UK, and the USA.

Tatyana O. Ilnitskaya explored the input for comparative analysis of entrepreneurial models and competencies implemented in higher education of Russia, the UK and the USA.

Florence Lucci contributed several academic innovation models to develop students’ business competencies pertaining to entrepreneurship education at the higher education level in the United States.

Received 12.01.2018; accepted for publication 18.04.2018.
The authors have read and approved the final manuscript.

Информация об авторах:

Плужник Ирина Ленаровна – доктор педагогических наук, профессор, заведующий кафедрой иностранных языков и межкультурной профессиональной коммуникации экономико-правовых направлений Тюменского государственного университета, Тюмень, Россия. E-mail: i.l.pluzhnik@utmn.ru

Ильницкая Татьяна Олеговна – старший преподаватель кафедры иностранных языков и межкультурной профессиональной коммуникации экономико-правовых направлений, магистр экономики Тюменского государственного университета, Тюмень, Россия. E-mail: t.o.ilnickaya@utmn.ru

Флоренс Луччи – доктор делового администрирования (ДДА), профессор менеджмента и маркетинга Муниципального колледжа Квинсигамонд; визит-профессор программы Фулбрайт (весна, 2018), Вустер (Массачусетс), США. E-mail: flucci@qcc.mass.edu

Вклад соавторов:

Плужник И. Л. разработала теоретическую концепцию статьи и методологическую базу для моделирования составных элементов академической модели в вузовском обучении предпринимательству в России, Великобритании и США.

Ильницкая Т. О. провела сопоставительное исследование содержания академических моделей и компетенций при обучении предпринимательству в вузах России, Великобритании и США.

Флоренс Луччи обобщила и представила типичные и эффективные модели обучения предпринимательству в вузах США.

Статья поступила в редакцию 12.01.2018; принята в печать 18.04.2018. Авторы прочитали и одобрили окончательный вариант рукописи.