

Competitive Strategies of Vocational Schools and Universities in Implementing Continuing Education Programs

I. Korshunov, V. Peshkova, N. Malkova

Received in
May 2018

Ilya Korshunov

Candidate of Sciences in Chemistry, Professor, Head of the Lifelong Learning Group, Main Scientist, Institute of Education, National Research University Higher School of Economics. Address: Bld. 10, 16 Potapovskiy Lane, 101000, Moscow, Russian Federation. Email: ikorshunov@hse.ru

Vera Peshkova

Candidate of Sciences in History, Senior Researcher, Institute of Sociology of the Federal Center for Theoretical and Applied Sociology of the Russian Academy of Sciences. Address: Bld. 5, 24/35 Krzhizhanovskogo St., 117218 Moscow, Russian Federation. Email: pever@mail.ru

Natalya Malkova

Candidate of Sciences in Pedagogy, Associate Professor, Foreign Languages Department, Moscow Polytechnic University. Address: 38 Bolshaya Semenovskaya St., 107023 Moscow, Russian Federation. Email: malkova_n_v@mail.ru

Abstract. Open statistics is analyzed to examine the successful strategies of implementing continuing education (CE) programs by vocational schools and universities. The study identifies the industries that benefit from those successful strategies the most. In vocational schools, such industries include medicine, oil and gas production and chemical processing, transport, mining and

metallurgy, electrical engineering and telecommunications, pedagogy, tertiary sector, architecture and construction. As for higher education, CE programs are pursued most actively by medical, multidisciplinary, pedagogical, law and economics, and polytechnic universities. A relationship has been established between CE enrollment and general student population.

Implementation of CE programs contributes to financial sustainability of vocational institutions. Successful strategies may ensure from 25 to 40 percent of the total budget in educational institutions that specialize in oil and gas production and chemical processing, medicine, electrical and power engineering, ICT, law and economics. Efficient strategies include narrow specialization and collaboration with strategic enterprises, while online marketing tools play a relatively small part.

Continuing education was found to contribute little to financial sustainability of large national universities despite higher CE enrollments, barely accounting for five percent of their total budget. At the same time, a number of small institutions of higher education (regional branch campuses and private universities) can generate over half of their income from CE programs, university status playing a guiding role in student attraction. Analysis of university strategies shows that low interest in implementing

*Translated from Russian
by I. Zhuchkova.*

CE programs for the good of regional industries is related to the absence of CE-based indicators in annual monitoring reports and the lack of established policies for integrating CE programs into higher education.

Keywords: adult education and learning, continuing education, university, vocational school, successful strategies in education.

DOI: 10.17323/1814-9545-2019-1-187-214

Professional development and training is one of the most common types of continuing education. Such educational services are largely provided by universities, continuing education institutions, and vocational schools.

With population ageing and student enrollments reducing, adult education becomes a rapidly growing segment in higher education the world over [Hinton 2012]. Strategic plans of nearly 60 percent of U.S. higher education institutions report a significant increase in adult students in their lifelong learning programs [Cook, King 2005].

Back in the Soviet Union, centralized planning was employed to meet the economy's demand for skilled labor force, in professional occupations in particular. In the post-Soviet era, solutions depend on the market situation and the ability of an educational institution to develop a successful strategy adequate to the currently existing socio-economic needs.

The goal of this study was to analyze the results of implementing competitive strategies in continuing education (CE) by public vocational schools and universities. For this purpose, relations were examined among target industries, terms of program implementation, effectiveness of attracting learners in the CE market, and nascent opportunities for increasing the financial sustainability of educational institutions. The success measures included CE enrollment size, number of CE programs offered, tuition, and financial outcomes of program implementation.

The study is based on Federal State Statistics Service (Rosstat) statistics¹, open data of the Ministry of Education and Science of Russia^{2 3}, findings of the Monitoring of University Effectiveness⁴, and the information that educational institutions are required to publish on their official websites. The latter includes data on the education pro-

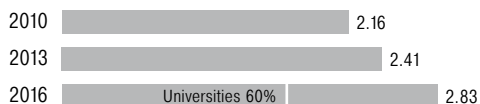
¹ Federal State Statistics Service (2017) *Povyshenie kvalifikatsii i professionalnaya podgotovka rabotnikov organizatsiy v 2016 g. Tom I* [Employee Training and Development in 2016. Volume I], Moscow: Rosstat.

² Information on Learning in Organizations Implementing Continuing Education Programs in 2016 According to Form 1-PK: <http://opendata.mon.gov.ru>

³ Analytical Report on Implementing Continuing Education Programs in the Russian Federation in 2015: <http://www.as-dpe.mon.gov.ru/files/content-file/2/analit-doklad-2015.pdf>

⁴ Monitoring of University Effectiveness acc.to Form 1: <http://indicators.mic-edu.ru/monitoring/?m=vpo>

Figure 1. **Growth in the Number of Adult Students in CE: Years 2010, 2013, and 2016**, according to Rosstat (mln people)



Source: Federal State Statistics Service (2010) *Dopolnitelnoe professionalnoe obrazovanie rabotnikov v organizatsiyakh v 2010 g.: statisticheskiy byulleten. Tom I* [Employee Continuing Vocational Education and Training in 2010: Statistical Bulletin. Volume 1], Moscow: Rosstat; Federal State Statistics Service (2013) *Dopolnitelnoe professionalnoe obrazovanie rabotnikov v organizatsiyakh v 2010 g.: statisticheskiy byulleten. Tom I* [Employee Continuing Vocational Education and Training in 2013: Statistical Bulletin. Volume 1], Moscow: Rosstat; Federal State Statistics Service (2017) *Povyshenie kvalifikatsii i professionalnaya podgotovka rabotnikov organizatsiy v 2016 g. Tom I* [Employee Training and Development in 2016. Volume I], Moscow: Rosstat.

grams being administered, their cost, finance and business operations, self-study reports, evidence of completion, availability of a resource center or applied skills center, and interactions with industrial and social partners.

Continuing education programs are the fundamental component of the adult education and learning system in Russia, CE graduates accounting for over 44 percent of employed adults (aged 25 to 64) [Korshunov et al. 2018]. The absolute number of CE students is growing by 5 percent on average yearly (Fig. 1).

Over 3,400 universities and vocational schools serve 80 percent of all CE students, remaining the largest providers in this market. Universities have larger CE enrollments (1.686 million students in 2016, or 60% of total CE enrollment) than vocational schools (604,000 students, or around 21%), even though vocational institutions implementing CE programs are almost twice as many as universities offering the same services, and their number is trending upward. Independent CE organizations have also become a lot more common in Russia, but they cannot boast great contributions to the population of CE students (about 19%). As a comparison, the percentage of CE courses taken at university or college in the United States was only 18 percent in 2004⁵.

Adult Learning in the System of Vocational Education

There are about 1,800 institutions of vocational education in Russia, which can be classified by target industries for which their education programs are given. Nearly one third of all vocational schools are multidisciplinary (Fig. 2), but the largest CE enrollments are observed in medicine, followed by multidisciplinary, architecture and construction, pedagogical, transport, and other categories (Fig. 3).

⁵ National Center for Education Statistics. Digest of Educational Statistics: https://nces.ed.gov/programs/digest/2004menu_tables.asp

Figure 2. **The Breakdown of Vocational Schools Offering CE Programs by Industry (%)**

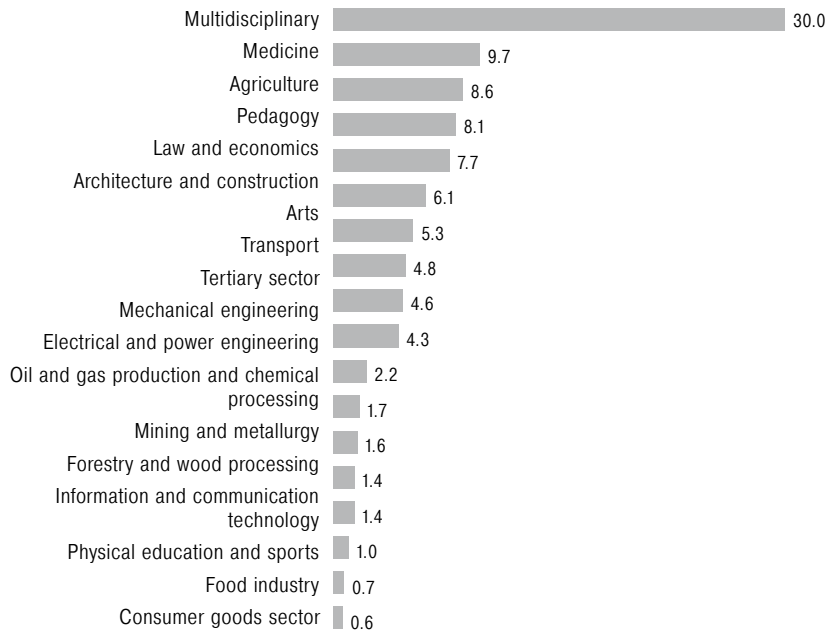


Figure 3. **The Distribution of CE Students Attending Vocational Schools by School Specialization (%)**

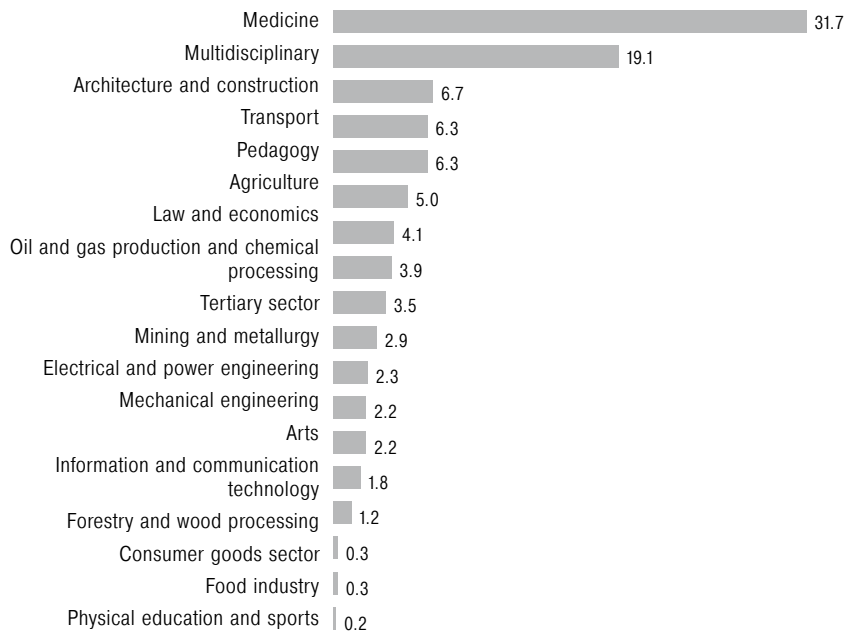
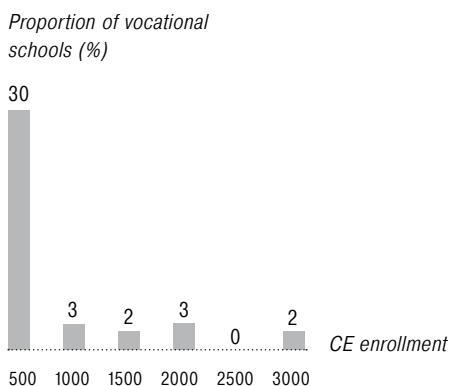


Figure 4. **The Distribution of Vocational Schools Specializing in Architecture and Construction by CE Enrollment**



Not all vocational schools engage actively in adult education. Successful CE strategies ensuring over 500 adult students yearly (which is equal to average general enrollment of Russian vocational schools) are pursued, on average, by only 16 percent of the institutions in every industry, enrollments of most vocational schools being under 500. To compare, U.S. two-year community colleges enrolled 2.6 million people aged 25 and older in CE classes in 2001, which accounted for 44 percent of their total candidates that year⁶.

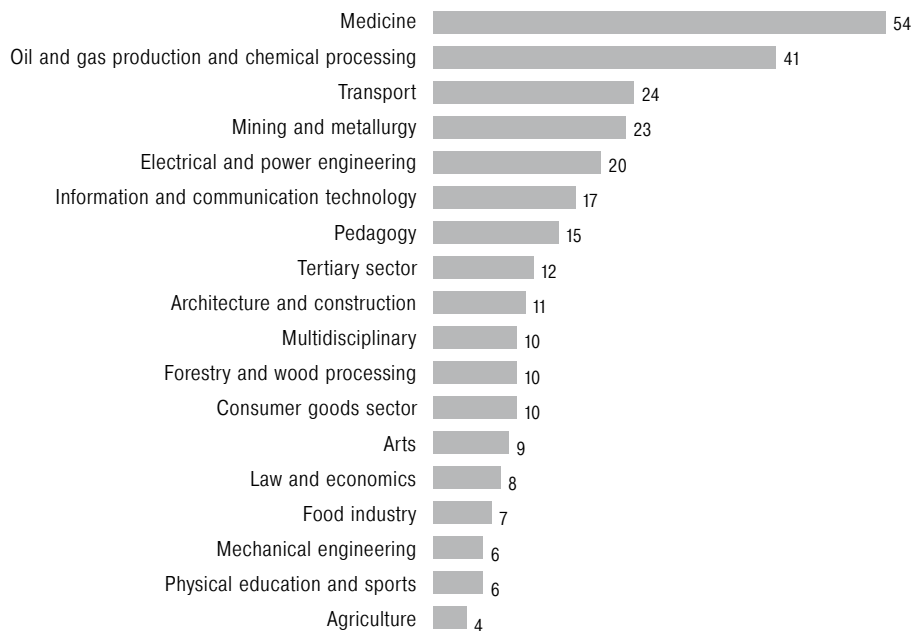
Figure 4 shows the distribution of vocational schools specializing in architecture and construction by CE enrollment. The nature of such distribution depends very little on the industry and reflects the existing level of management in continuing education.

We assessed the number of successful vocational schools with CE enrollments over 500 in every industry and estimated their proportion in the total number of vocational schools in the given industry (Fig. 5). Competitive adult education strategies are developed most effectively in such industries as medicine, oil and gas production and chemical processing, transport, mining and metallurgy, electrical engineering and telecommunications, pedagogy, the tertiary sector, and architecture and construction.

Analysis of publicly available information from college websites shows that industry specialization of CE programs offered by vocational schools usually matches their own specialization. Successful educational institutions do not waste their effort offering non-core programs in subject fields where they lack professional competence and recognition among employers capable of supplying an influx of people willing to engage in professional development and training.

⁶ National Center for Education Statistics. Digest of Educational Statistics: https://nces.ed.gov/programs/digest/2004menu_tables.asp.

Figure 5. **Proportions of Vocational Schools with over 500 CE Students in Different Industries (%)**

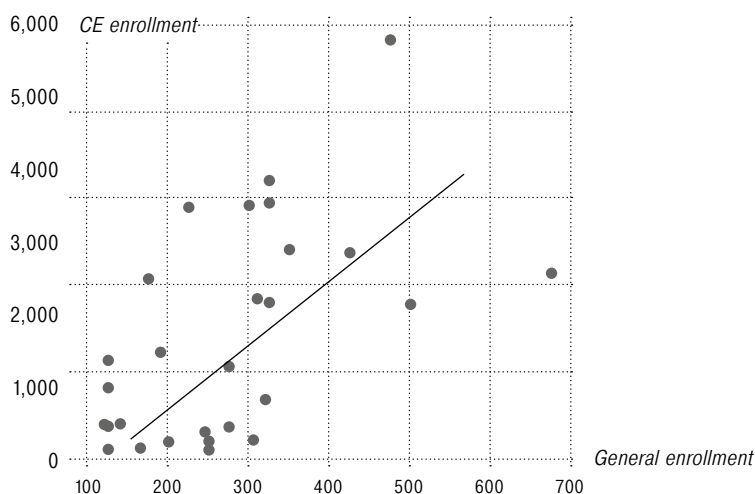


An important role in the development of adult education and learning, including CE programs, is played by “anchor” strategic enterprise partners. Most educational institutions indicate on their websites availability of employers supplying the best part of their CE enrollment. This is always done by the institutions that have already created, with direct participation of employers, well-equipped resource centers (applied skills centers). “Anchor” employers usually have an established culture of corporate learning, especially in medicine, pedagogy, transport, oil and gas and chemical processing, mining and metallurgy, electrical and power engineering, ICT, and the tertiary sector. Such culture of personnel training and development is translated to partner educational institutions. In this situation, training may be organized by the common founder, which is the case of medical and pedagogical schools.

Interactions between vocational school and employer (enterprise, corporation, bank, etc.) often take the form of public-private partnership, when the parties conclude an employee training agreement. For example, Novourengoy Multidisciplinary Vocational School won the contract for training employees of five Gazprom-owned backbone enterprises at once as well as for taking orders from public employment services.

Large institutions tend to be more successful in developing adult education programs. A moderate correlation was found between

Figure 6. **The Relationship between General and CE Enrollment of Vocational Schools Specializing in Agriculture, Transport, Oil and Gas Production and Chemical Processing, etc.**



general and CE enrollment of vocational schools (Fig. 6). On the one hand, vocational schools with larger permanent faculties enjoy more resource opportunities and more qualified instructors to involve in CE programs. On the other hand, senior students are more likely to engage in continuing education on a paying basis. Larger general enrollments correlate with higher numbers of CE students in the real economy (processing, transport, services). This correlation, however, is not observed in the public sector (medicine, pedagogy, arts, sports), as the common founder often sets enrollment requirements under private or governmental contracts at their own discretion.

High level of technology in the learning setting is critical for adult education programs ordered by real economy enterprises. Therefore, a competitive strategy to ensure high enrollment in CE programs must involve, as its integral component, an industry-oriented resource or applied skills center equipped under industrial partnership agreements and government subsidy contracts. Three quarters of all institutions with successful CE strategies have a resource or applied skills center represented adequately on their website. Successful institutions without such dedicated centers can be found in agriculture and the consumer goods sector—organizationally, it is rather difficult to provide joint equipment of learning centers with employers represented by small and medium-sized businesses.

Availability of a system for preparation for and participation in WorldSkills championships is typical of competitive CE strategies in the tertiary sector, medicine, pedagogy, and law and economics, being slightly less typical of those in mechanical engineering and forest-

ry. Information about engagement in the WorldSkills project is found to play a small part in attracting CE learners in such industries as oil and gas production and chemical processing, agriculture, and ICT.

The breadth of the spectrum of CE programs offered, concentrated around the institution's specialization, is directly related to the school's CE enrollment and revenue. Successful vocational schools offer from 30 to 100 CE programs. It is not the absolute number of programs that matters, however, but rather how well such programs meet the employee training demand in the "anchor" employers' industries.

The content of CE programs provided by vocational schools is largely designed to develop and improve specific skills and competencies. Vocational schools rarely, if ever, offer continuing education in entrepreneurship, management strategies to increase labor productivity (quality management, lean manufacturing, etc.), career orientation, or 21st century skills (communication, collaboration, problem solving, creative thinking), regular courses in new forms of literacy (digital, legal, financial, environmental, etc.), educational projects, clubs, or co-learning opportunities. Little by little, as demand for those kinds of training is growing, new niches inevitably emerge in the development of adult education and learning on the basis of vocational schools.

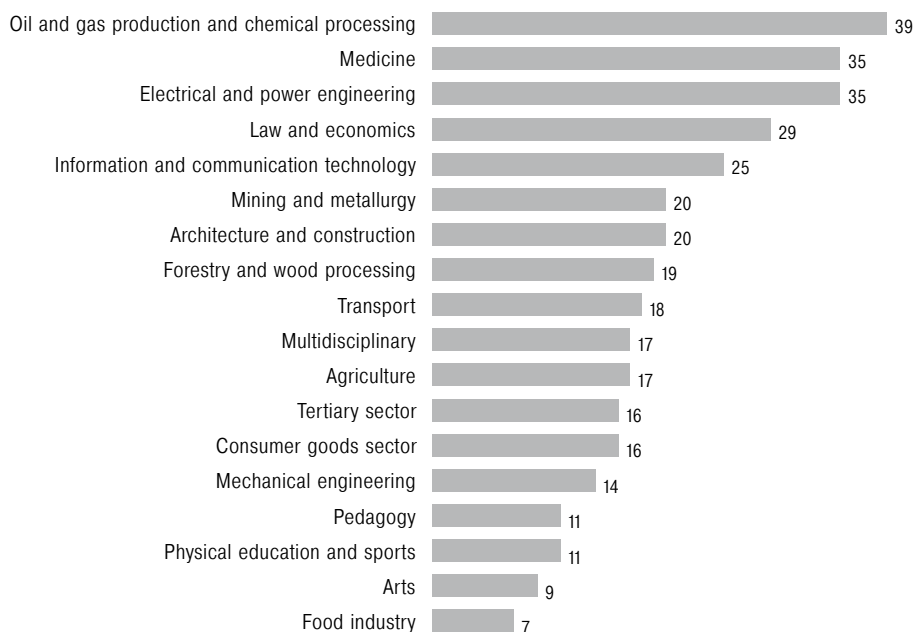
Website of an educational institution is one of the marketing tools to promote CE programs. The quality of website as a means of positioning and advertising CE programs was assessed based on the following criteria: availability of a dedicated page, including a banner with a link to it on the main page, the list of CE programs, information on tuition, certificates of completion, CE enrollment, various formats of communication between the vocational school and employers in terms of joint adult education programs, and, finally, relevance of website content and design.

Analysis of the websites of the sampled institutions shows that vocational schools largely undersell this type of educational services. Even with successful institutions, it is hard to find information on the content of CE programs, evidence of their completion or tuition on their websites. Adult education centers are not given prominence in the overall structure of institutions on their websites, being underrepresented or represented inadequately, with minor exceptions.

Websites of successful educational institutions differ across industries. The most straightforward and easily accessible information on CE programs, tuition and terms of implementation is observed in industries where demand is formed by numerous small businesses, such as services or transport. CE-related website quality is also higher in educational institutions affiliated with industries that have an established culture of systematic employee training, which include oil and gas and chemical processing, mining and metallurgy, electric and power engineering, and medicine.

Income from CE programs may account for a significant proportion of vocational schools' total consolidated budget. Analysis of publicly

Figure 7. The Share of Income from CE Programs in the Total Budget of Vocational Schools, by Industry (%)

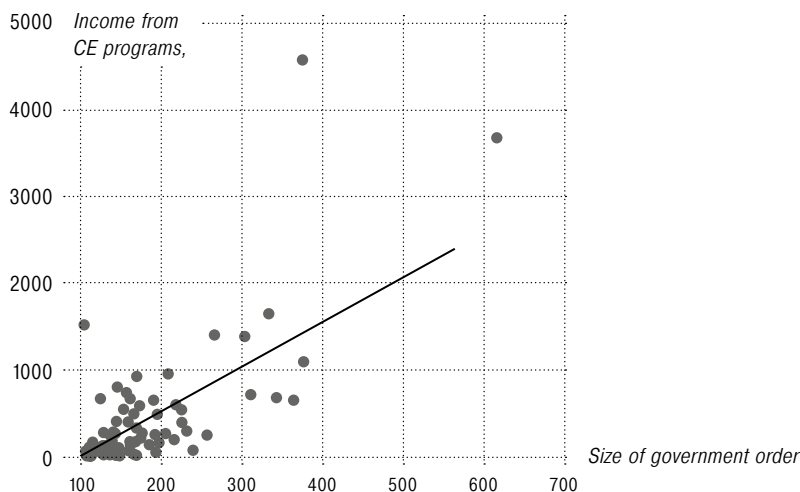


available information on finance and business operations of vocational schools shows that over one quarter of total income may be obtained from CE programs by institutions of the following specializations: oil and gas production and chemical processing (39%), medicine (35%), electric and power engineering (35%), law and economics (29%), and ICT (25%) (Fig. 7)⁷. Financial success of educational institutions is determined here by established industry-specific cultures of employee training, technology-rich learning environments, great risks associated with violation of safety standards, and expectations of returns from education in the industry on the part of population. Lower financial effectiveness of vocational schools is observed in the tertiary sector, the food industry, and the consumer goods sector. Those industries are largely represented by small and medium-sized businesses which have not yet come to treat enhancement of employee skills under the new market conditions as an effective tool for improving service quality, labor productivity and economic growth [Korshunov et al. 2018]. Income from adult education and learning accounts for 15–20 percent of the budget of most vocational schools offering training in the processing industries.

Managers of CE departments of vocational schools seek to make a noticeable contribution to the total revenues of their organization.

⁷ When analyzing proceeds from adult education, no distinction was made between income from CE and general vocational programs.

Figure 8. **The Relationship between the Income from CE Programs and the Size of Government Order for Implementation of General Vocational Programs** (Million Rubles)



For that purpose, the range and cost of programs are determined to make this part of income proportionate to the overall turnover. On average, income from adult education accounts for 23 percent of the overall turnover in vocational schools with competitive strategies for implementing CE programs.

Revenue from CE programs depends more on the number of learners attracted than on the size of tuition, which is determined by program duration, vocational school specialization, and region. For instance, tuition for dental students in medical schools may reach 30,000 rubles, being higher in Moscow than in regions. However, tuition costs in CE programs that generate most of the income in successful educational institutions are fairly low, the average being 5,000–10,000 rubles—the price that an adult employee is willing to pay for training.

The amount of adult education and learning services rendered by institutions is related to the size of government order for implementation of general vocational programs (Fig. 8). A possible explanation is that, with larger government orders, the overall financial and procurement opportunities of the institution are growing, allowing modernization of infrastructure and facilities and recruitment of proactive administrators and instructors who are ready to develop adult education as a sideline entrepreneurial project. This relationship also follows from the correlation between enrollment in CE and general vocational programs (see Fig. 6). Meanwhile, industry-specific differences are not as manifest here as they were when the absolute numbers were compared, a pronounced linear dependence (Pearson's coefficient over 0.73) being observed for all the industries (Fig. 8).

To summarize the findings, a competitive adult education strategy to be pursued by vocational schools should have the following features:

- Strategy effectiveness is contingent on the target audience, i. e. consumers of educational services. Highly-effective industries for implementing CE programs include medicine, oil and gas production and chemical processing, transport, mining and metallurgy, electrical engineering and telecommunications, pedagogy, the tertiary sector, and architecture and construction.
- Flexible adjustment of the programs offered to meet the needs of the specific industry, which implies close collaboration with strategic employers in the industry, their engagement in CE implementation, and narrow specialization. The latter provides the opportunity not only for gaining attention and recognition in the market but also for training employees in the industry repeatedly, enhancing the programs and customizing learning resources to meet the needs of different enterprise categories.
- Technology-rich learning environment; availability of a resource center created under national and regional subsidy projects jointly with employers.
- Strict instructor requirements, including a postgraduate degree and experience in the real economy sector.
- Evidence of completion recognized in the industry.
- A flexible pricing policy contingent on the major/profession and the average salary in the region and industry as a whole.
- Low engagement in education of economically inactive population (the unemployed, immigrants), which yields little profit.
- A dedicated website for the resource center or CE department with direct (one-click) and obvious access to program description pages, user-friendly interface and navigation, and a clearly presented structure of programs.

This study does not look specifically at the implementation of professional training programs for adults, but similar trends can be expected there.

Adult Learning in the System of Higher Education

Universities have a long history of implementing adult education programs [Mukhina, Kuposov, Borodachev 2013].

According to a 2016 monitoring, multidisciplinary, polytechnic universities and those in law and economics offer the highest number of CE programs (Fig. 9)⁸.

Multidisciplinary, medical and transport universities hold the three leading positions by the number of CE students (Fig.10).

⁸ Monitoring of University Effectiveness acc. to Form 1: <http://indicators.mic-edu.ru/monitoring/?m=vpo>

Figure 9. The Distribution of Universities by the Key Industries in CE Programs

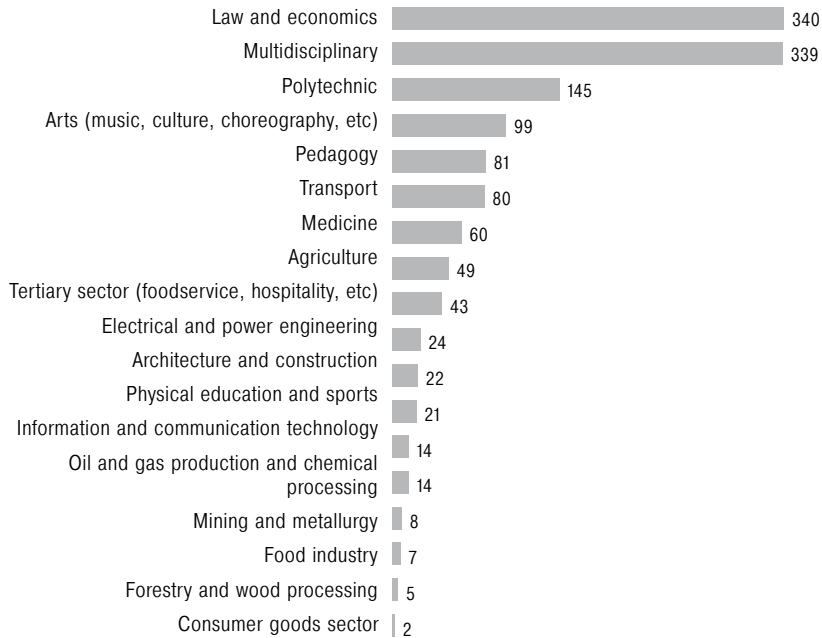


Figure 10. The Distribution of University CE Enrollment by Industry (1,000 Students)

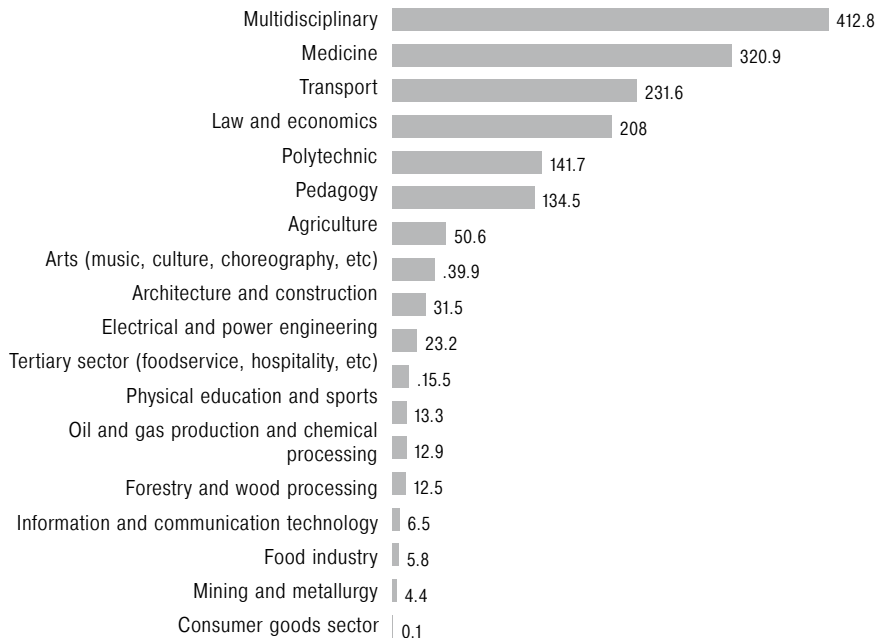
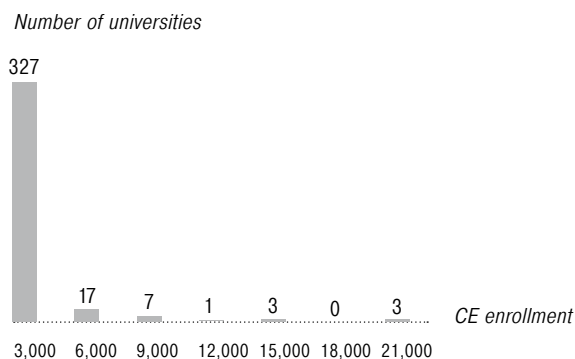


Figure 11. **The Distribution of Multidisciplinary Universities by CE Enrollment**



CE enrollment is much higher in universities than in vocational schools. Strategies ensuring over 500 students yearly are pursued by on average 38 percent of universities in every industry, as compared to 16 percent in vocational education. Yet, universities are considerably larger themselves, their general enrollments averaging 3,000. Organizations with 3,000 CE students or more account for 10 percent of all Russian institutions of higher education. Therefore, it is harder for a university to achieve a comparably successful strategy in adult education than for a vocational school.

In some industries, competitive strategies—those which generate over 3,000 CE students—are hardly implemented by 8–15 percent of the universities. Figure 11 presents the distribution of classical multidisciplinary universities by CE enrollment.

Not many universities regard CE programs as a source of development and know how to attract adult learners. University development strategies published online relatively rarely involve modernization of adult education departments. CE enrollment statistics are either lacking or indicated as a matter of form. No sources of CE development are specified, and the priority directions of CE programs are under-formulated and unrelated to the research specialization that is most heavily subsidized.

Universities' strategy documents postulate the need to increase the number of CE programs, but no directions for or measures of development are stipulated. The prospects for CE development are described in a rather formalized way, as "professional development and training of faculty members" or "creation of new competitive CE programs as ordered by the real economy sector enterprises that are recognized in the Russian and global education market". Meanwhile, demand for CE is indicative of the needs of regional enterprises and organizations, which many universities were originally conceived to meet.

Web pages of universities' CE departments feature elements of CE development strategies, pricing policies and organizational structure. However, management of CE departments is rarely captured in basic strategic plan documents, which is most likely related to the absence of CE development indicators in university monitoring criteria as well as to the national policy on continuing education.

Development strategies of Russian universities do not involve a system typical of the world's top universities where general education programs (Master's and Bachelor's degrees) are broken into micro degrees—credentials focused on specific skills sets and based on lifelong learning courses [Berker, Horn, Carroll 2003].

Interest of prospective CE learners could certainly be inspired by:

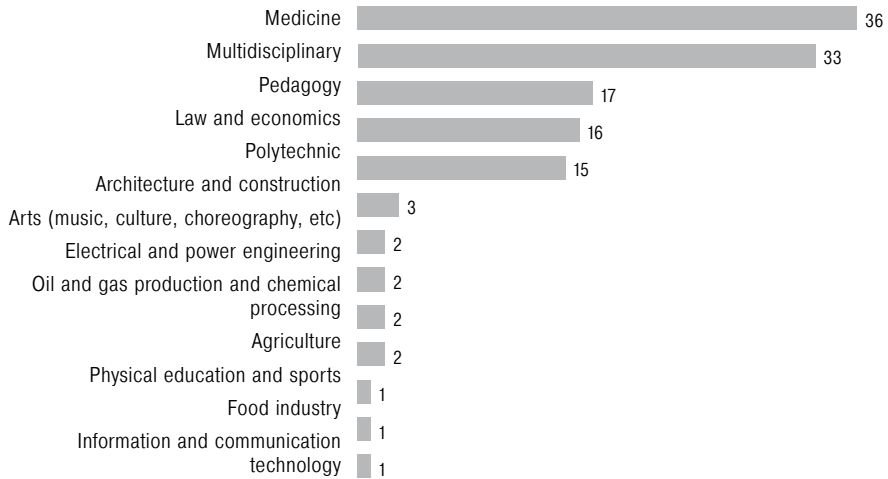
- Easier intra- and inter-university transfer of credits and students between courses and degrees (agreements between institutions regulating which courses or modules are eligible for credit in case of returning or transfer students);
- Flexible and accelerated program schedules and designs, which include weekend-only classes; online instruction; critical support services during non-traditional hours; multiple entry, exit and reentry points; more frequent start times throughout the year; shortening and modularizing of curricula; and interim credentials linked to career advancement [Kazis et al. 2007];
- Government co-funding of CE programs for adults [Bosworth, Choitz 2004].

Continuing education in the United States is viewed as a “back door” to the most prestigious universities in the world. A GPA required to petition for acceptance at the Harvard Extension School may be lower than at Harvard University, while there is absolutely no difference in the quality of the courses and other opportunities. Besides, students in continuing education programs often enjoy certain accommodation privileges over general degree students, like single rooms when they come to complete the residency requirement before graduation⁹. In addition, breaking higher education into short-term degree modules allows adult learners to spread their tuition payments, reducing strain on their budgets and making education far more accessible.

In Russia, most CE programs imply full time attendance. Russian universities do not offer a wide range of online courses for adults, as adult learners tend to have higher expectations than regular university students. According to Rosstat, enrollment in distance-learning CE programs changed little between 2010 and 2016, barely accounting for 7–8 percent of total CE enrollment [Korshunov et al. 2018]. Meanwhile,

⁹ Kaufman J. Hacking Higher Education. Part 2. Hacking Harvard: <https://josh-kaufman.net/hacking-higher-education-harvard/>

Figure 12. **The Distribution of Universities with over 3,000 CE Students by Industry**



the number of distance learning students in CE programs offered by U.S. universities spiked by almost 250 percent in just three years, between 2002 and 2005¹⁰. The rapid growth of web-based learning is explained by the interest of the key stakeholders, as 62 percent of employers consider online learning as effective as full-time programs¹¹.

Figure 12 shows the distribution of Russian universities with over 3,000 CE students across industries. Strategies for ensuring a wider reach to the audience come easier to medical, multidisciplinary, pedagogical, polytechnic universities, and schools in law and economics. Institutions specializing in the tertiary sector, consumer goods sector, forestry and wood processing, electrical and power engineering, and ICT—those which mostly serve small and medium-sized businesses—find it the hardest to implement such strategies.

Disciplines in which CE programs are offered correlate with university's profile of specialization. Multidisciplinary universities enjoy larger CE enrollments, which is, however, not the case with vocational schools. Most probably, the very status of university is one of the strongest motivators for engaging in continuing education. This advantage is actively used by a number of small universities, CE playing a more important part in their development models than general de-

¹⁰ Eduventures (2005) *Online Distance Education Market Update 2005: Growth in the Age of Competition*. Boston: Eduventures, LLC: <https://encoura.org/resources/enrollment-resource-library/#>

¹¹ Eduventures (2005) *Developing Effective Channels to Corporate and Government Markets, Part I*. Boston: Eduventures, LLC: <https://encoura.org/products-services/eduventures-research-and-advisory-services/>

Figure 13. **The Distribution of Small Universities (under 3,000 Students) whose CE Enrollment is Higher than General Student Population by Industry**

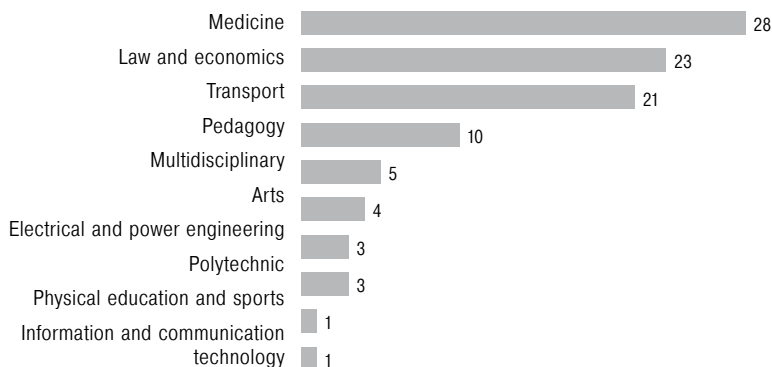
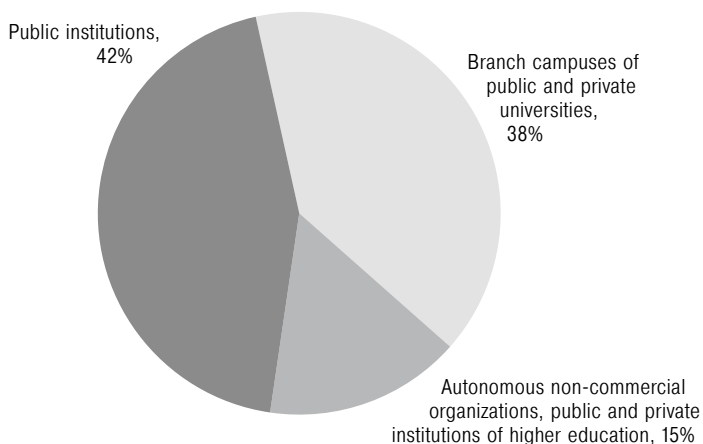


Figure 14. **Types of Higher Education Institutions with Student Population under 3,000 whose CE Enrollment is Higher than General Student Population by Industry**



grees. Their CE enrollment rarely exceeds 3,000 but is always higher, sometimes several-fold, than their general enrollment in Bachelor's, Master's and Specialist's degree programs. Figure 13 shows the distribution of such institutions, which amount to around 100 in Russia, by industry. The leading positions are held here by medical, transport and pedagogical colleges and schools in law and economics.

The majority of such educational institutions are either private institutions of higher education or branch campuses of public and private universities (Fig.14).

Websites of such universities provide more details on CE programs, include CE development roadmaps, and focus on the needs and possibilities of adult learners. Information on professional development and training courses is completely straightforward and accessible with one click. A ranking of courses based on student reviews is offered to facilitate the choice of a program. Furthermore, the CE sections of their websites also contain information on terms of instruction, opinion polls, virtual internship opportunities, etc.

Continuing education for adults can make one of the strategic goals of a small university. Private universities and, particularly, branch campuses often find it difficult to win research grants from the government or generate income from R&D projects due to the lack of investment. As a consequence, local universities and especially branch campuses often make continuing education their primary source of revenue. Determined to survive without public funding, such institutions demonstrate the financial potential of this sector of educational services. Therefore, it can be assumed that large public universities could increase the amount of their CE services dramatically, too.

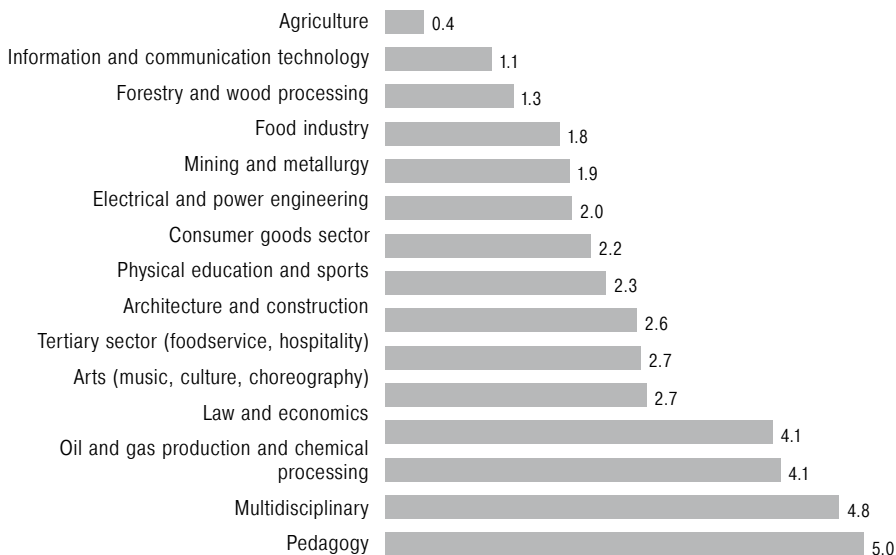
In developed countries, the sector of small universities is also rather small, accounting for only 3–5 percent of total adult students in the United States, for instance. Due to the lack of status and program diversity, such institutions represent no competitive threat to classical regionally accredited universities in terms of numbers [Bailey, [Badway](#), [Gumpert](#) 2003:1–4].

Open source statistics show that income from CE programs is exponentially higher in public universities with over 3,000 CE students than in vocational schools or small universities—in absolute terms. Nevertheless, it does not constitute a substantial share of the consolidated budget.

The highest percentages of CE programs in the revenues of public universities pursuing the most successful strategies are observed in pedagogical (5%) and classical multidisciplinary (4.8%) universities, being slightly lower in oil and gas and chemical processing (4.3%) and law and economics (4.1%). In the rest of the universities, the share of CE -derived income in the total budget is under three percent, being the lowest in agricultural institutions (0.4%) (Fig. 15).

The shares of income from CE programs are low not only because this type of activity is not evaluated in annual assessments of university effectiveness but also, and rather, because government subsidies are decisive for the budgets of universities with technology-rich learning environments. It is government funding, including research and development contracts, that makes the most of a large university's income. Neither do proceeds from CE programs look impressive when compared to the size of tuition paid by university students in general degree programs, which may account for 30 to 80 percent of the total budget.

Figure 15. **The Share of Income from CE Programs in the Total Budget of University as a Function of University Specialization (%)**



There is a relationship between general and CE enrollment for public universities with over 3,000 CE students. Just as vocational schools, universities with larger student populations have more resources, more instructors qualified to implement varied CE programs, and more senior students to involve in continuing education on a fee basis (Fig.16).

More than likely, this is also the reason why increase in the size of government order for higher education correlates with increase in the income from CE programs (Fig.17).

This study reveals a weak relationship between the informational value of CE websites and the number of CE students in most classical and industry-specific universities. A website, therefore, is not crucial for attracting CE learners, a more important promotion factor being the overall university image and brand, its reputation among the employers and the target audience in the macroregion.

Analysis of university websites shows that successful institutions administer up to 200 CE programs. Universities offer a price range of 600–600,000 rubles, which is much broader than in vocational schools. However, most of the income is provided by large CE enrollments, not by the prices as such. The more CE programs are designed and advertised through the website, the larger CE enrollment, university status being a critical factor of attraction.

Programs offered by universities include not only specific modern disciplines (e.g. in IT and programming languages) but also mana-

Figure 16. **The Relationship between General and CE Enrollment in Multidisciplinary (Classical) Universities (1000 students)**

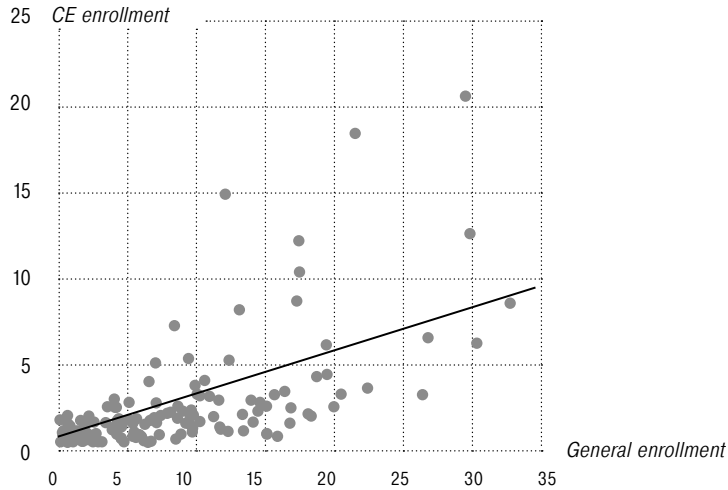
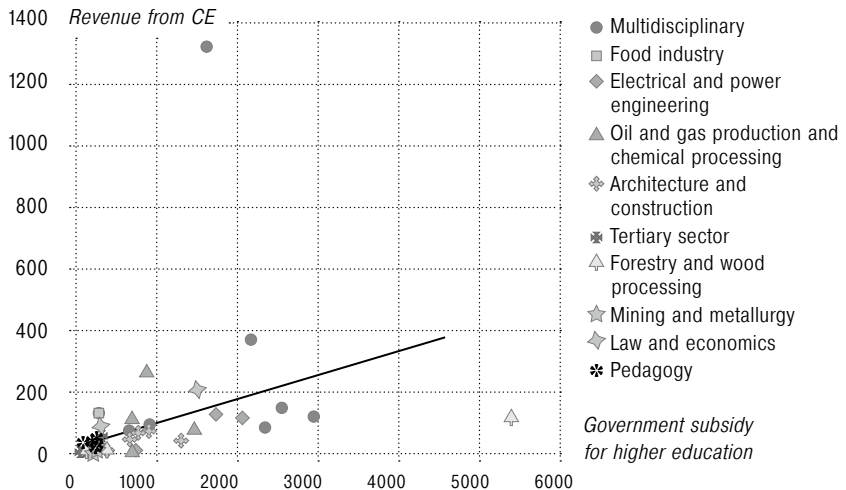


Figure 17. **The Relationship between Government Order for Higher Education and Revenues from CE Programs (mln rubles)**



gerial skills, MBA degrees, programs in leadership development, entrepreneurship, quality management technology, innovation product development and commercialization, financial literacy, information literacy, and other types of literacy for students and adults. Universities try to combine attracting learners in the free market with implementing programs for the public sector and enterprises. The most successful CE departments not only have extraordinary competencies to teach but also know which instructors, professionals and experts should be

invited to pass on the technology and skills within their area of specialization. They act as education program sales centers and central hubs in the network of profession-specific competencies that they have built around themselves.

At the same time, universities have not yet become the true “backbone” of continuing education for regional industries and, particularly, for the population. While the share of personal development programs (offered by “universities of the third age”, for instance) is low in Russian higher education, western universities are discovering brand new market niches in this sector, pursuing the strategy of targeting on students “from every time zone, every culture and career background, every age from 18 to 89.”¹²

Conclusion Based upon analysis of continuing education programs implemented by vocational schools and universities, the following indispensable features of the most successful and competitive CE strategies have been identified:

- Adjustment to the needs of the key stakeholders, i. e. CE learners and their employers; development of programs for the industries in which employees have been systematically engaged in professional training and development at universities and vocational schools;
- Close collaboration with employers, their engagement in CE implementation as well as in the use of resources and facilities and in making decisions on new training and development programs, new formats of skills assessment and accreditation;
- Recognized university-level evidence of completion and diploma or certificate issued by the corporate learning center of the parent enterprise;
- Regular improvement of the existing programs and development of new ones with due regard to the needs of “anchor” employers, the industry’s labor market, and the population of different age cohorts in a specific region;
- Technology-rich learning environment; availability of a resource or applied skills center created under national and regional subsidy projects jointly with employers; orientation toward the latest standards (ISO, WorldSkills, etc.);
- Attraction of instructors with excellent reputation in academia and the industry to make programs more attractive and increase brand recognition; strict instructor requirements, including experience in the real economy sector;

¹² Harvard University Extension School <https://www.extension.harvard.edu/>

- A flexible pricing policy contingent on the major/profession and the average salary in the region and the industry as a whole;
- Teaching methods and learning strategies tailored to adults, which take into account learners' life and career experience and ensure convenient program schedules and designs;
- Monitoring of CE quality and learning outcomes using feedback on career trajectories, information on post-graduation changes in salary, and other measurable CE outcomes.

References

- Bailey T. R., Badway N., Gumpert P. J. (2003) For-Profit Higher Education and Community Colleges Columbia University Academic Commons. *Community College Research Center Brief*, no 16, pp. 1–4. Available at: <https://doi.org/10.7916/D8HD841Z> (accessed 10 February 2019).
- Berker A., Horn L., Carroll C. D. (2003) *Work First, Study Second: Adult Undergraduates Who Combine Employment and Postsecondary Enrollment*. Washington, DC: National Center for Education Statistics. Available at: <https://nces.ed.gov/pubs2003/2003167.pdf> (accessed 10 February 2019).
- Bosworth B., Choitz V. (2004) *Title X: A New Federal-State Partnership in Higher Education for Working Adults in the 21st Century*. *FutureWorks: Strategies for Regional Development*. Available at: http://www.futureworksworld.com/uploads/8/1/1/6/81165812/title_x_2004.pdf (accessed 10 February 2019).
- Cook B., King J. E. (2005) *Improving Lives through Higher Education: Campus Programs and Policies for Low-Income Adults*. Washington, DC: American Council on Education, Center for Policy Analysis.
- Hinton K. E. (2012) *A Practical Guide to Strategic Planning in Higher Education*. Available at: <http://www.sunymaritime.edu/sites/default/files/media/Documents/A%20Practical%20Guide%20to%20Strategic%20Planning.pdf> (accessed 10 February 2019).
- Kazis R., Callahan A., Davidson C., McLeod A., Bosworth B., Choitz V., Hoops J. (2007) *Adult Learners in Higher Education: Barriers to Success and Strategies to Improve Results*. *Employment and Training Administration. Occasional Paper 2007–03*. Available at: <https://files.eric.ed.gov/fulltext/ED497801.pdf> (accessed 10 February 2019).
- Korshunov I., Kuzheleva K., Grachev B., Sergeev K. (2018) *Obuchenie i obrazovanie vzroslykh: vstrebovannye programmy, vozrastnaya i otraslevaya struktury* [Adult Learning and Education: Programs in Demand and the Age-Industry Structure]. *Fakty obrazovaniya* № 1 (16) [Education Facts #1(10)], Moscow: Higher School of Economics.
- Mukhina T., Kuposov Y., Borodachev V. (2013) *Istoriya i perspektivy razvitiya otechestvennoy sistemy dopolnitel'nogo professional'nogo obrazovaniya v usloviyakh vysshey shkoly* [The History and Future Prospects of Continuing Vocational Education and Training in Russian Universities], Nizhny Novgorod: Nizhny Novgorod State University of Architecture and Construction.