A Model for the University Operating as a Center for the Formation of a Local Environment for Adult Ongoing Education

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Abstract

This paper features the results of a study conducted as part of the project ‘The Development of Universities as Centers for the Formation of a Local Environment for the Ongoing Education of the Adult Population of a City’, undertaken by Sochi State University in 2016 as an assignment commissioned by the Ministry of Education and Science of the Russian Federation.

The paper examines, via a comparative-pedagogical approach, the theoretical and practical foundations of putting together a local environment for adult ongoing education and provides a rationale for the role of universities in the development and operation of a municipal system of ongoing education. The authors share the results of an analysis and systematization of the major trends in adult ongoing education by reference to the current best practices employed domestically and internationally. Based on the findings of a theoretical analysis of relevant research and a problem analysis of the activity of institutions of higher learning operating in local markets for educational services, the authors single out several models for the formation by universities of a municipal educational environment for adult ongoing education and draw a conclusion about the need to develop a more comprehensive, integrative, and consistent model. The paper brings forward a new model for the university operating as a center for the formation of a local environment for adult ongoing education, characterizes its specific components (objective-and-function, content, structural-logistical, instrumental-technological, and organizational-managerial), establishes the prospects for it as a tool for managing the education system, and sets out the key strategies for putting together a local educational environment for adult ongoing education.

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1. Introduction

The logic outlined in this study is based on the idea that gathering pace at the moment is the global and domestic trend toward urbanization, which is reflected in growth in the number of urban settlements and population being concentrated in them. The Russian Federal State Statistics Service (Rosstat) has the latest share of Russia’s urban population at 74% (as of January, 2015) and predicts the trend is set to continue into the future (Demograficheskii ezhegodnik, 2015). Researchers are discussing the multiplicity and interpenetration of a city’s spaces – industrial, recreational, architectural, geographical, and social. The latest research into urbanization has focused both on factors related to the first geography (location, natural resources, climate, etc.) and on those related to the second geography, and, above all, human capital (education, professional skills, cultural diversity, population mobility, mode of life, etc.) and its impact on the city’s development.

Russia’s present-day realities are clearly indicative of boosts in the caliber of human capital being an indispensable component of the social-economic development of the nation’s cities in particular and the country as a whole. The organization of conditions conducive to the effective preservation, reproduction, and build-up of human capital is viewed as a factor in the competitiveness of cities and is a managerial objective that requires a theoretical pillar of support. From this standpoint, what becomes a crucial strategic factor in the sustainable development of cities in the present-day world is the formation of highly-organized urban environment zones with modern urban infrastructure, cutting-edge information channels and technology, and environmentally favorable living conditions. Putting together and maintaining a mutual equilibrium between all of the city’s life-sustaining subsystems is, no doubt, indissolubly associated with the creation and operation of the city’s educational environment.

In this context, of relevance is the study of issues related to putting together an environment for the ongoing education of a city’s adult population. Furthermore, in resolving the issue of getting the labor market filled with professional personnel, it pays to factor in labor market statistics for every region and city across the nation. The study discussed in this paper was conducted in the resort-city of Sochi. Sochi is a major economic center on the coast of the Black Sea and is one of the largest resort cities in the Russian Federation. The city’s current population is over 400,000 (data from the Local Office of the Russian Federal State Statistics Service for Krasnodar Krai (Sait Territorial'noego organa)). Based on the latest ranking of occupations in the labor market, Sochi’s most in-demand professions currently are: Real Estate (19.4% of all job offers in Sochi), followed by Commerce (19.2%), Production (7.8%), Health Care/Pharmacy (45%), Tourism/Hotels/Restaurants (4%), Construction (3.8%), Top Management (3.4%), Domestic Staff (3.4%), and others (Review of Sochi Labor Market Statistics (Obzor statistiki rynka)).

The city’s current social infrastructure is creating the preconditions for reproducing qualified personnel, boosting the people’s physical and moral health, and upholding their cultural values. The high development levels of the city’s social infrastructure, developed as part of the staging of the XXII Olympic Winter Games and XI Paralympic Winter Games, make it possible to attract qualified personnel from other regions, which enables the city to employ top-level specialists. Having said that, the city is facing the issue of replenishing this resource via the local population. Indeed, burgeoning production, new areas of activity emerging, and increasingly computerized production processes require providing training for the labor force, including teaching them new knowledge and professional skills, which explains the growing demand for vocational education programs. Another problem, as the authors see it, is the contradiction between being willing and being prepared to invest in vocational training. Among those who are interested in implementing educational practices related to ongoing vocational learning for adults are, above all, employers represented by the management of state-run and private institutions. However, not many employers are prepared to invest in vocational training and retraining for their staff. Staff members are oftentimes compelled to personally bear the costs of their vocational training, which, no doubt, affects the timeframes on completing an ongoing education program, its efficiency, and, ultimately, one’s resulting command thereof. It is also worth considering the fact that education is not just about short course completion timeframes but requires a consistent approach and enough study
time to ensure the best results.

Thus, right now the city's educational policy ought to be aimed at resolving the issues facing its labor market and enhancing the caliber of its human capital, while the interaction between the urban environment and the city's adult residents ought to be considered through the prism of putting together specific models for transforming its educational environment.

An instrument of this kind, in the authors' view, is the university, which can be viewed as a center that creates the necessary and sufficient space for diverse educational services so as to help meet the various educational needs of the city's adult residents. It is universities that are capable today of playing the role of providers of academic and socio-cultural learning oriented toward the city's interests and the continual development and education of the population – with a view to enhancing one's professional skills and helping one adapt to suit the ever changing conditions in the market.

In regulating the city's development, of growing relevance is the development of a model for the operation of a university as a center for the formation of an educational environment for the city's adult residents.

2. Materials and methods

This study's object is to explore in detail the process of formation of a local environment for adult ongoing education. Its subject is a model for the university operating as a center for the above. For purposes of this study, the authors chose to employ the following methods: conducting a theoretical analysis of the literature; exploring and summarizing best national and international practices; conducting a comparative analysis of the organization by universities of adult ongoing education; modeling the process and conditions of the formation by universities of a local environment for adult ongoing education. The process under examination was modeled in alignment with a set of approaches developed to assist in its application in pedagogical research (A.P. Tryapitsyna, Yu.S. Tyunnikov, V.Z. Yusupov, etc.), including a systemic approach, which ensured the analysis of the study's subject as an integral structure consisting of other systemic-structural units; a competency-based approach, which helped bring the process of formation of the educational environment more in line with the social order placed with the education system, the expectations of regional employers, and the educational needs and expectations of adult citizens.

The logic underlying the study's quest was constructed in such a way as to proceed from the interdisciplinary study of the municipal environment for adult ongoing education as a systemic-localized field for the multidimensional movement of man across the educational space and interaction between the various social institutions and particular subjects in the process of formation of the urban educational environment to the identification of approaches to the development of universities as centers for the formation of an educational environment that may create the conditions for the various categories of adults, including those with disabilities, to be able to engage in useful activity.

3. Discussion

The issue of ongoing education is one of an integrated interdisciplinary nature. It has been theoretically conceptualized by philosophers, sociologists, pedagogues, psychologists, and representatives of other sciences.

In current scholarly discourse, the term “ongoing education” is construed in different ways: as lifelong education (Kolesnikova, 2013), continuing education (Beili, 2013), further education (Babanova, Babanova, 2013; Naumova, 2009), etc. Apart from the general features of adult ongoing education and the continuity of the way educational activity is plotted as a whole, researchers have identified the specific features of the ongoing education of this age group related to the characteristics of the very subject of ongoing education – an adult person (Rezinkina, 2016). In its personal aspect, adult ongoing learning can be viewed as “moving along a trajectory of learning, with your creative potential growing progressively as you engage in the various stages in learning (the general educational stage, professional training, self-education, and further education)” (Rezinkina, 2016: 50).

The concept of continuous education involves three key objects: a person (the “forward motion vector” – the professional skill vector; the “upward motion vector” – the development vector; the “horizontal motion vector” – the occupational reorientation vector), educational
programs/processes (characterizes the continuity of educational activity in transiting from one of its types to another, from one of a person’s life stages to another); the organizational structure of education (a networked mix of educational institutions and the interrelationship between them; the educational services space) (Anoshkina, Rezvanov, 2001; Lomakina, 2014; Sistema podderzhki, 2013). Ongoing education possesses the major features of a system: universality, continuity, integrativeness, etc. (Belkina, Sergeeva, 2011: 161).

Foreign and domestic researchers have correlated the idea of ongoing education with the historical, social, and cultural context of society’s development, brought to light the conceptual ideas of the system of plotting ongoing education, identified its various characteristics (internal, quantitative, functional, etc.), described its structure, identified its major types (formal, non-formal, and informal education) and stages, and identified the major factors necessary for implementing it (P.F. Anisimov, T.G. Brazhe, A. Brooking, K. Wain, S.G. Vershlovskii, B.S. Gershunskii, Yu.A. Zakharov, V.A. Ermolenko, N.E. Kasatkina, Yu.N. Kulyutkin, S.S. Lebedeva, A.M. Novikov, M. Knowles, M. Newman, V.G. Onushkin, S. Parson, V.E. Robak, A.I. Subetto, J. Habermas, M. Hatton, R. Edwards, etc.). Foreign (European) research has brought to light the following concepts: lifelong learning, adult education, continuing education, recurrent education, continuing professional education, learning organization, and learning society. Both domestic and foreign researchers have admitted that ongoing education is intended to ensure one’s vertical and horizontal mobility throughout one’s life.

The Russian scholarly literature has developed several methodological approaches providing an insight into the concept of “educational environment”: cultural-social (N.V. Krylova, V.I. Slobodchikov, S.V. Tarasov, etc.), information (M.I. Bashmakov, S.I. Pozdnjakov, P.A. Reznik, etc.), psychological (V.A. Klimov, V.A. Yasvin, etc.), and systemic-synergetic (A.I. Bochkarev and V.N. Gruzdeva). To describe the educational environment, researchers have identified a set of its significant characteristics (being integral, multi-aspect, systematic, personalized, etc.) and specific criteria for assessing it (scope, intensity, modality, steadiness, generality, dominance, coherence, mobility, etc.) and provided an insight into the role played by the educational environment in the city’s development.

Of special significance to the conduct of this study are works that bring to light the social-cultural and professional-personal determinations of further vocational education (Yu.S. Tyunnikov (Tyunnikov, 2015)), the conceptual foundations and technology of the design of a municipal system of adult ongoing education (L.V. Rezinkina (Rezinkina, 2016)), share the findings of contrastive analysis of national and international models for adult ongoing education (V.V. Kravchenko (Kravchenko, 2012) and others), and share the results of plotting adult learning routes (A.E. Maron, L.Yu. Monakhova, E.G. Koroleva (Maron i dr., 2015; Koroleva, 2015), and others).

However, despite the vast volumes of amassed theoretical and empirical material, thus far there has been insufficient research into issues related to the design and formation by universities of a local educational environment in alignment with the current and prospective needs of regional markets for labor and occupations and the educational needs of adults. There is a pressing need for developing the theoretical-methodological foundations of and a conceptual model for the university operating as a center for the formation of an environment for adult ongoing education, as well as working out relevant research-and-methodology support for it.

4. Results

In the context of this study, a model is to be construed as an analogue for a piece of reality that acts as a system of particular elements and linkages binding them together.

The authors picked as their object for pedagogical modeling the process of operation of universities as centers for the formation of a local environment for the ongoing education of the city’s adult population. The model is intended to reflect the nature of the interaction between vocational education and the labor market, developers and consumers of educational services (individuals, employers, and employer associations), and institutional intermediaries between them and examine the relationships between subjects of adult ongoing education.

At the preliminary-analysis stage, the authors explored the relevant literature and the current best national and international practices related to organizing adult ongoing education under conditions of a municipal environment; conducted a SWOT-analysis of present-day universities as
focal points for the educational potential of cities and centers for the formation of a local environment for adult ongoing education; determined the current trends in the adult ongoing education of citizens; identified the various models reflecting the specificity of activity on the formation of a local environment for adult education. The following inferences were drawn based on the findings of the preliminary analysis:

– in Russia’s large cities, there are several universities that qualify to be a center for the local environment for adult ongoing education, each oriented toward a specialized sector of educational services. In smaller cities, this could be a single university which would design its educational programs based on the specificity of the city’s entire population. If need be, it could serve as an institutional intermediary between consumers of educational services and a college based in a different region through the organization of learning using distance technology or employ other forms of interaction;

– a system of adult ongoing education that will run under real-life conditions of the municipal educational environment ought to be created factoring in the characteristics of specific regions so as to ensure an appropriate caliber of the educational environment to help actualize the residents’ personal and professional needs; it ought to be able to react promptly to new socio-economic realities (Rezinkina, 2016) and be adequately preemptive in reacting to such developments;

– the environment for adult ongoing education ought to be developed factoring in the latest trends in the operation and development of the city’s local market for educational services. Thus, for instance, when it comes to smaller cities, one could factor in the following characteristics (as identified by T.A. Polyanskikh): the limited functions of the market’s subjects; the narrow product range of educational services; the network-like organization of higher vocational education; colleges operating in local markets for educational services lacking a well-thought-out, coherent marketing policy (Polyanskikh, 2007: 12);

– an analysis of national and international models for adult ongoing education (competency-based, socio-cultural, institutional-environment, personalized, integrative-differentiated, cluster, adaptational, andragogical, acmeological (Anis’kina, Mel’nik, 2015; Bordovskaya, 2015; Ermolenko, 2008; Kravchenko, 2012)) helped to not only gain a deeper insight into real objects and processes they are intended to help conceptualize but come to the conclusion about the need to construct a new, more comprehensive, integrative, and consistent model that would be devoid of the above shortcomings and would bring the educational environment formation process more in line with the latest needs of the regional labor market and the educational expectations of adult residents;

– when it comes to the modeling of municipal systems of adult ongoing education, the following approaches may take on particular relevance: a systemic approach, which ensures the unity and interconnectedness of adult formal, non-formal, and informal education; a competency-based approach, which makes it possible to bring the process of formation of the educational environment more in line with the needs of the regional labor market; a personalized approach, which helps create the prerequisites and conditions for the subject being able to transit to a new, higher level of professional and personal development;

– the design of the educational environment may be pursued along two major directions: professional orientation (in terms of its subject content, the environment line is in keeping with one’s deepening cognitive needs and the latest trends in the development of human civilization) and socialization (the environment line represents the communicative, culture-forming content of education, the ever-expanding range of one’s relationships and ties with the outside world) (Khodyakova, 2013). “When the process lacks one of the lines, its outcomes turn out to be much poorer; in its extreme manifestations, this lack renders the process subjectless, preventing it from ensuring one’s mastery of the necessary knowledge and notions ..., or makes it strictly pragmatic, preventing it from helping actualize one’s humanistic, socio-cultural essence” (Khodyakova, 2013).

The authors’ model for the university operating as a center for the formation of a local environment for adult ongoing education is distinguished by the following characteristics: 1) it is a model for adult proactive education and development that is oriented toward the personal expectations, educational needs, and axiological objectives of adults, the needs of the regional labor market, and a prospectively thought-out regional order for personnel trained in the various professional areas; 2) it is an adaptive model that helps detail or generalize information that is part
of the model’s components and transform it in keeping with the characteristics of the regional labor market and the municipal education system.

Based on what has been proposed by scholar N.V. Bordovskaya, the major system-forming factors underlying the authors’ model include: sets of adult educational needs that determine the structure and content of social orders placed with municipal education; the availability of educational programs constructed with continuity in mind and educational institutions that would enable the plotting of individual learning routes within adult ongoing education factoring in people’s educational needs and prior academic and professional experience; specific mechanisms for stimulating adults to engage in academic activity throughout their professional career and life’s journey (Bordovskaya, 2015).

Modeling the process of operation of the university as a center for the formation of a local environment for adult ongoing education, based on the pedagogical-design algorithm developed by Yu.S. Tyunnikov (Tyunnikov, 2000), includes the following design components: objective-and-function, content, structural-logical, instrumental-technological, and organizational-managerial (Figure 1).

The objective-and-function block is a deployed system of objectives and coordinated principles for the formation of a local environment for adult ongoing education. The block is developed based on the following logic: one formulates and provides a rationale for the prime objective (the development of the system of adult ongoing education), which then is broken down into structural components; then the structural components of the prime objective are broken down into separate elements (i.e., we construct an “objectives tree”).

To note, what needs to be designed is not particular goals and objectives but a coordinated system they make up, which, if implemented, will enable the multidimensional personal and professional development of the city’s adult residents moving about the local educational space and will create the conditions conducive to this kind of development; a goals and objectives system being designed ought to be in alignment with the key ideas underlying the concept of “education throughout life” and ought to be constructed factoring in the distinctive characteristics of the various regions so as to ensure an appropriate caliber of the educational environment to help actualize the residents’ personal and professional needs and meet the current and prospective needs of the regional labor market.

Among the crucial principles on which the system of adult ongoing education ought to be predicated are: integrality, continuity, integration, flexibility and manoeuvrability, seamlessness and infiniteness, being multi-tiered, individualization, cyclicity, variative forms and methods of learning, educational preparation being in alignment with real personal and social needs, universality and complementarity, openness and practical orientation, innovativeness (Astakhova, 2011: 89–90), being multi-staged, multi-functionality, and the proactive education and development of a person.

The content block. The procedure for the content-based development of the process being modeled involves: identifying priorities for the activity of universities related to the formation of a local environment for adult ongoing education; developing relevant functional relationships between interacting subjects in the context of putting together an educational environment. This block of the model features 3 types of relationship.

The first type of relationship characterizes actions that underlie the college’s dealings with regional/municipal authorities and the labor market concerning the development of the system of further vocational education and personal development of adults, and resolving the issue of employment in the city. These relationships, which are present in any region, include:

– direct and reverse relationships between colleges and the regional/municipal labor market, which are aimed at identifying the needs and expectations of the regional labor market and boosting the caliber of designed and implemented programs for the professional and personal development of adults;
Fig. 1. Model for the operation of the university as a center for the formation of a local environment for adult ongoing education.
the college’s dealings with the employment service regarding the current and prospective state of the region’s labor market and the prospects for employment;

– the reverse relationship between the college (a supplier of educational services) and consumers of educational services, which reflects the strengths and weaknesses of these services.

The availability of sustainable and regular first-type relationships can be viewed as a crucial element in the integration of regional markets for educational services and labor, as a necessary condition for being able to react promptly to new social-economic realities.

The second type of relationship creates an open, saturated educational environment and helps actualize in the system of ongoing education the differentiation principle, which expresses the requirement to let learners choose from several variants of educational programs based on their potential, changing needs, and prospects for professional and personal growth. This type of relationship provides a tangible boost in the caliber of interaction between developers and consumers of educational services, although in regions, however, this kind of relationship has yet to develop to the fullest. Activity on its establishment and development may be viewed as one of the factors in the innovation development of the university as a center for the formation of a local environment for the ongoing education of the city’s adult population. This kind of relationship incorporates the following:

– continual monitoring of educational requests coming in for programs for professional education and personal development;

– adapting existing educational programs to the individual educational needs of adults and the needs of specific employers and developing new programs, including those geared to people with disabilities;

– collecting information on educational services for the city’s adult population using crowd-sourcing technology and structuring it;

– creating and maintaining a relevant information resource on the Internet (a single portal);

– informing, through the media, the various social groups of the state of the market for programs for the professional and personal development of the city’s adult population;

– providing learners with remote controlled and regulated access to educational programs and the content of learning material;

– providing learners with the opportunity to get online consulting and enjoy other forms of interaction with instructors, including remote on-the-job training.

The third type of relationship is virtually not around today and exists in a rather fragmentary way, although, however, it is regarded to be a crucial element in the formation of a local environment for ongoing education. This includes:

– psychological, methodological, and medical-social support for adults as part of their cognitive-information interaction with information and communication technology (Barabash, 2015);

– counseling adults on their educational needs to ensure they get help when defining their educational request, choosing the content of education they are looking to get, its timeframes and forms (Goncharova i dr., 2013; Gornyakova, 2014; Koroleva, 2015; Safonova, 2010); helping determine where what they want is possible and where it is not;

– assisting adults in designing their individual learning routes.

The structural-logical block. The structural-logical development of the process involves: identifying and providing a rationale for specific stages in the joint activity of representatives of the various social institutions (e.g., an interdepartmental team of specialists) or employees of a structural unit within the university (e.g., a center for further vocational education) on the formation of a local environment for adult ongoing education; planning out specific steps on achieving goals and objectives at each stage.

The instrumental-technological block. The design of this block is directly associated with the choice of key strategies for the formation of a local educational environment for adult ongoing education and that of relevant tactics at each stage of the process being modeled. The major strategies include: Strategy for Creating an Information Field for Adult Ongoing Education, Strategy for Creating a Zone of Online Adult Education, Strategy for Designing Educational Programs Based on the Regional Characteristics of the Education System and the Labor Market, and Strategy for Providing Support for Adult Consumers of Educational Services across Their Learning Routes.
The organizational-managerial block. The procedure for the organizational-managerial development of the process being modeled involves: determining the possibility of engaging in the process of formation of a local educational environment the various social institutions and organizing the institutional interaction of subjects representing them; creating network interaction between participants in the educational process within the information-educational sphere; preparing and training coordinators and tutors for work related to adult ongoing education under conditions of an information society functioning in a climate of burgeoning global mass communications.

5. Conclusion
The model developed by the authors as part of this study is a variant of the solution for the issue of the formation of a local environment for adult ongoing education and may become a tool that will help manage the educational system, which is what constitutes this study’s practical significance. However, incorporating this model into existing reality requires fine-tuning specific forecasts made by reference to the characteristics of regional reality.

The major focus areas for further research into the matter may include issues related to the development of a model for the scenario management of the formation of a local environment for adult ongoing education.

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