



European Journal of Educational Research

Volume 8, Issue 4, 1257 - 1268.

ISSN: 2165-8714

<http://www.eu-jer.com/>

University of Education: Structure and Main Components of Management

Aleksandr A. Fedorov*

Immanuel Kant Baltic Federal University,
RUSSIAN FEDERATION

Ekaterina P. Sedykh

Minin Nizhny Novgorod State Pedagogical
University, RUSSIAN FEDERATION

Elena V. Mialkina

Immanuel Kant Baltic Federal University,
RUSSIAN FEDERATION

Received: August 22, 2019 • Revised: September 20, 2019 • Accepted: October 11, 2019

Abstract: The article analyzes the evolution of pedagogical systems and the practice of universities in the world. The work reveals the essence and main structural components of the university education, as a special institution of higher education, designed to become a systemic solution to the problem of management and development of teacher education. The model presented by us includes the following components: education, as a platform for transferring innovative solutions into practice; Mega-Science - a system of research collaborations that provides advanced solutions to global problems; technologies - research constructs according to the Lego principle, generating local problem-solving based on a cluster; implementation - a system of investment decisions on the implementation of developments in the practice of activity; innovation is a system for the formation of products open to use that stimulate the development of education. The paper presents the main results of these developments, conclusions are made about the need to form a university of education as a special system operating within the framework of the concept of open pedagogical education and aimed at creating a federal scientific and educational hub of global importance for reproduction and the formation of human capital in scientific, engineering activities, the generation of new solutions in the field of training and development of teaching staff in.

Keywords: *Management, pedagogical systems, development of teacher education, university education, education management.*

To cite this article: Fedorov, A. A., Sedykh, E. P., & Mialkina, E. V. (2019). University of education: Structure and main components of management. *European Journal of Educational Research*, 8(4), 1257-1268. <https://doi.org/10.12973/eu-jer.8.4.1257>

Introduction

The development of modern pedagogical education goes through a series of processes of crisis nature, conditioned by general conservatism and inertness of global and regional educational systems. Studies in the development of national education confirm the existence of crisis both within the system of training and development of teaching staff: there is no balance in the age structure of the teaching community; aging pedagogical personnel is observed everywhere, in combination with the lack of personnel needs planning and imperfect system of personnel reserve development. There are no mechanisms for staff rotation of teachers; the system of advanced training is not efficient enough. It is necessary to change the approach to management and development of pedagogical education, which ensures global international interaction and the implementation of scientific research, while preserving the national specifics of activity.

The objective of our study is to study international experience with the goal of creating a model of the University of Education. The model of the University of Education includes components - educational targets, relations between components, educational logistics. A model is created for a specific geographical location (Russian Federation).

The global educational agenda poses new problems, both for each educational, organization and for regional education systems: new challenges are being formed, changes in the content of education and in the educational process itself, new approaches to teacher and learner interaction and to teacher training processes are required. Let's designate the most significant reference points causing the formation of a new space of educational transformations:

- "technological revolution" (in the terminology of Schwab (Schwab, 2016) – industrial), which forms the image of the invested future and the idea of the effect of "inevitable technological trends" (Kelly, 2017). There is a configuration of the future and its characteristic targets, which cannot be ignored and should be considered as an area of operational decision-making. As a rule, they are described by the terms "digital learning" or "digital education". The accepted point of view is to characterize the situation as a "period of radical changes" in the architecture not only of the learning

* **Corresponding author:**

Aleksandr Fedorov, Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod, Russian Federation. ✉ aleksfedorov175@gmail.com



process, but of education in general. The challenge that is being formed in this position is twofold: on the one hand, there is an obvious need for substantial investments in the educational infrastructure; on the other - the transformation of training for the education system. Lack of response to this challenge with a planning shoulder of 10–15 years will lead to the irrevocable withdrawal from the world education system (Luksha, 2013).

- the crisis of generational values and new employment. In any management decision, it is necessary to take into account a serious gap that has arisen in the period of 10–15 past years between the dominant generation and the X and Y generations. The emerging formation of “decisive children” (Serra term) is being mentioned (Serra, 2016). It represents not only the foundation human capital in the next 10-15 years, but also a serious threat to effective generational interaction.

- disunity - “sectoral”, “industrial” approach to the system; lack of systemic personnel policy; outdated system of retraining, advanced training and the formation of a managerial reserve; the absence of consolidated logistics and all-penetrating services (Zamanov, 2014);

- imbalance - a clear and growing disproportion of quality between “weak” and “strong”, “urban” and “rural” educational systems; non-transparent, uneven distribution of resources; lack of attention to the “median”, the mass educational segment;

- non-reflectiveness - the lack of systemic multi-dimensional measurements, based on which it is possible to build predictions on the development of schools, the characteristics of growing up, cognitive images of childhood and to make promising management decisions;

- relevance - the absence of ideology of aspiration and attitudes towards advanced development, insufficient understanding of the uniqueness and originality of each regional educational system, its competitive advantages.

The existing composition in the institutions providing educational activities in the direction of higher pedagogical education is unstable, inefficient and radically deficient. At present, pedagogical environment has 30 pedagogical universities and about 200 universities and branches where teachers are trained (the percentage of pedagogical programs in the structure of university programs ranges from 1% to 70-80%) in Russian Federation (Peskov, Luksha, Savchuk, Kozharinov & Kartaeva, 2017).

Each of these universities experiences the specific problems and gaps that accompany the operational functioning of the segment. In our opinion, this is due to the following deficits (Myalkina & Zhitkova, 2018; Sedykh, 2017; Fedorov, Soloviev, Ilaltdinova, Kondratyev & Frolov, 2018):

- the lack of a single leading research agenda in the field of education and mechanisms for the implementation of research results in the real educational process. As a result, the almost complete (with the exception of 2 centers) lack of systematic research in the field of cognitive science, not to mention their introduction into subject-matter practices and education;

- the lack of sustainable cooperation with the regions in strategic areas: the calculation of staffing needs with a planning shoulder of at least 10 years; the system of retraining and advanced training, which is mostly in the institutes for the development of education; formation of personnel reserve directors; network programs university-school; outdated system of “vocational guidance”;

- the presence of significant differences in the quality of teaching staff in different regions;

- the lack of balance in the age structure of the pedagogical community in the regions (the Minin University, together with the Ministry of Education and Science, conducted a three-year study in all regions of the Russian Federation) (Sedykh, 2015; Fedorov, Soloviev, Ilaltdinova, Kondratyev & Frolov, 2018).

- The slow pace of retraining of teachers in connection with the solution of the tasks of the strategy of the scientific and technological revolution and the development strategy of the “digital economy” (Peskov, Luksha, Savchuk, Kozharinov & Kartaeva, 2017);

- the lack of mass use is the only one available under the UGSN 440000 “Education and Pedagogical Sciences”, an effective and ergonomic version of the implementation of educational activities - the “double” five-year bachelor degree with 2 profiles (still using only 48% of universities). The existing composition of teacher training cannot provide effective solutions to the problems listed. A radical change in approaches to teacher education is required. There is a need to move to another platform, which, with an obligatory correlation with national specifics, is in the format of a global education agenda.

The aim of the study is to study university education as a new educational platform. This platform provides a transfer of scientific and technological developments to the educational process of general education and higher education. University of Education is the center of interaction between generations and the growth of teaching staff.

Literature Review

The basis of such a platform can serve as a model of the “Open Teacher Education of the Future” and the institutional solution “Universities of Education”.

The university education in the concept of a new pedagogical education is the main platform for the transfer of scientific and technological products to the educational process of higher and general schools based on high-tech digital and cognitive research, a center for intergenerational interaction and reproduction of teaching staff (Belyaeva, 2014).

Institutionally, a university of education is a relatively new, but not exclusive, formation. The world practice of education universities shows that initially they were created as educational institutions for training future teachers, but in the process of work they were forced to expand the boundaries of their activities, taking into account contemporary humanitarian problems and challenges (Al-Dajeh, 2012; Barber, Donnelly & Rizvi, 2012; 2013; Darling & Rothman, 2011). At present, these are rather universal educational and research centers focused on solving a wide range of social problems and improving the quality of life of the population (Myalkina & Zhitkova, 2018).

The oldest institution of higher education in this field and a leader in the field of education and social sciences, covering various aspects of education and applying an interdisciplinary approach to solving basic educational and social problems at the national and international levels is the Institute of Education of the University of London (IOE, n./d.). IOE was founded in 1932 on the basis of a college and currently implements undergraduate, postgraduate and postgraduate programs in the fields of pedagogy, psychology and social sciences. Master's programs such as education and international development, education and promotion of a healthy lifestyle, art in education, comparative education, leadership in education, training and leadership throughout life, an education philosophy, and sociology of education are being implemented (IOE, n./d.).

IOE research focuses on the problems of childhood, family life, school and its effectiveness, problems of education and international development, promotion of education for all.

The institute cooperates with partners in more than 100 countries (joint research, collaboration and consultation with governmental and non-governmental organizations).

University of Education (IOE, n./d.).

University of Education –University of Education (Lahore, Pakistan) is positioning itself as a university for the preparation of leaders in the field of teaching, research and management, capable of providing high quality and sustainable development at all levels of education (Shehla & Sadia, 2018).

The university was established in 2002 to train high-level teachers, whose quality of training meets international standards, as well as to work towards a qualitative change in the national education system, promoting educational innovations, and expanding international relations with educational institutions (Shehla & Sadia, 2018)

The university sees its mission in promoting attractiveness for young people to the teaching profession, international recognition of educational programs and national education in general (Shehla & Sadia, 2018).

Along with vocational training, special attention is paid to the personal development of students and extracurricular activities. Education is conducted under bachelor, master, and postgraduate programs in the field of pedagogy, the arts, social sciences, natural sciences, and information technology (Shehla & Sadia, 2018).

University of Education of Hong Kong (The Education University of Hong Kong, Ed UHK) -founded in 1994 on the basis of a college (since 1853), and then (since 1982) of the Institute of Language in Education (Institute of Language in Education) (IOE, n./d.).

The university offers training in the following areas: pedagogical sciences (preschool, primary, secondary, higher and vocational education), humanities, natural sciences, journalism and social sciences, medicine and health, art and design. EdUHK also offers a wide range of interdisciplinary programs specifically for international students developed as part of the Learning Plus initiative (Education-plus approach) (IOE, n./d.).

Paula Frassinetti Higher School of Education, Escola Superiorde Educação de Paula Frassinetti (ESEPF), Portugal is part of a network of educational institutions in Portugal, European countries and countries where Portuguese is the official language. The School prepares teachers for undergraduate, graduate, postgraduate education, as well as professional development programs for teachers. The university staff provides consulting and expert support to schools, coordinates the implementation of international educational projects funded by the EU, and conducts research in the field of education (Frassinetti, 2014).

The activity of the School is aimed at improving the quality of education in accordance with advanced techniques, integrated personal development, an individual approach to teaching students, expanding international cooperation and strategic partnership in the field of education. As part of the concept of lifelong learning and the expansion of influence on social and social development, the ESEPF considers education as a factor in human development and its goal is to train not only competent specialists, but also responsible citizens who can learn throughout their lives. The

implementation of the lifelong education approach is reflected in the curriculum for people aged 55 and older, Golden Age (Golden Age), who receive knowledge in the humanities, social and environmental sciences (Frassinetti, n./d.; 2014).

In general, the activities of the ESEPF are aimed at the realization of the idea of a decent life, social well-being, lifelong education and all-round development throughout life (Frassinetti, 2014). The mission of the School is to train teachers with the highest degree of scientific and pedagogical skills, whose activities will be aimed at improving the quality of life (Frassinetti, 2014).

The activity of the School is aimed at improving the quality of education in accordance with advanced techniques, integrated personal development, an individual approach to teaching students, expanding international cooperation and strategic partnership in the field of education. As part of the concept of lifelong learning and the expansion of influence on social and social development, the ESEPF considers education as a factor in human development and its goal is to train not only competent specialists, but also responsible citizens who can learn throughout their lives. The implementation of the lifelong education approach is reflected in the curriculum for people aged 55 and older, Golden Age (Golden Age), who receive knowledge in the humanities, social and environmental sciences (Frassinetti, n./d.).

In general, the activities of the ESEPF are aimed at the realization of the idea of a decent life, social well-being, lifelong education and all-round development throughout life.

National Institute of Education (National Institute of Education, NIE, Singapore) Established in 1991 on the basis of Nanyang Technological University (Zamanov, 2014).

The main activity is the training of teachers for the national education system. The contingent from which the staff is selected is 30% of the best graduates who have been educated in non-pedagogical universities (Zamanov, 2014).

The mission of the Institute is excellence in education and research in the field of education.

The institute implements training in graduate programs (Master of Education, Master of Education, Master of Science, Master of Arts), additional professional education, and postgraduate education (Zamanov, 2014).

At the university, a Center for Research in the Field of Pedagogical Theory and Practice was established - the basis for expert evaluation of educational reform programs in Singapore. The activities of the institute are determined by the nature of Singapore's state policy in the field of education, aimed at strengthening the motivation of those working in the field of education: students to enter pedagogical specialties; graduates for further employment in schools; new teachers to pursue careers; experienced teachers to develop their professional skills (Zamanov, 2014).

Teacher training involves three stages of pre-selection (resumes, tests and literacy assessment, psychological tests), training at the institute is the fourth stage of selection. Teachers and school principals in Singapore are public servants. Each teacher is fully paid 100 hours of professional development per year, thus maintaining a continuity of education throughout the entire professional cycle (Alishev & Gil'mutdinov, 2010).

NIE is a key element of the system of training and accompaniment of teachers in their professional activities, including a system of teacher development, a system of teacher mentoring, a system of counseling and methodological support for working at school (Efimov & Lapteva, 2013; Danilova, 2018).

Domestic education currently has no examples of creating universities of education in its pure form, but it makes sense to consider a number of universities that implement similar models (Peskov, Luksha, Savchuk, Kozharinov & Kartava, 2017).

The Higher School of Economics (HSE) Institute of Education is one of the key research and educational divisions of the National Research University Higher School of Economics. The Institute was established in August 2012 with the aim of strengthening the national leadership of HSE in ensuring educational reform and enhancing the competitiveness of HSE with respect to leading foreign universities. d evaluation of skills of the 21st century (HSE, 2019).

The mission of the institute is to contribute to the modernization of Russian education through advanced research and development and training of modern managers and researchers (HSE, 2019).

The university carries out integrated activities in a number of important thematic areas, both in educational activities and in the field of communications in the professional community in order to modernize education (HSE, 2019).

The main tasks of the HSE Institute of Education within the framework of research and expert activities: research and development in the field of educational content, development of proposals for the modernization of the education system, increasing its efficiency, development of legal mechanisms for the functioning and development of the education system, strategic consulting and maintenance of development strategies and programs education in the regions, assessment of the quality of education, the development of new approaches to the organization of educational activities and conducting monitoring studies in the field of education (HSE, 2019).

The Institute of Education, in conjunction with the International HSE Analytical Policy Analysis Policy Department, are key divisions within the CAE "Education and Human Development in a Changing World", whose main activities are: comparative analysis of the quality of higher education in the global knowledge economy, research of student experience, research of trajectories in education and professions, studies of modern childhood, the environment of education and development, the formation and evaluation of skills of the 21st century (HSE, 2019).

In this case, we can observe the development of the university expert focus, which is engaged in the analysis of the educational agenda and developing new strategic development guidelines (HSE, 2019).

Moscow City Pedagogical University is a university that uniquely unites 12 training and one research institute, a branch in the city of Samara, a school of water sports and a secondary school. The staff of the university includes more than 2,700 people. About 43,000 schoolchildren, college students, bachelors, masters, graduate students and doctoral students study in 43 educational buildings located in most administrative districts of the city of Moscow. Every year, more than 15,000 teachers and heads of various educational organizations attend advanced education programs at the university (Moscow State Pedagogical University, 2015).

In its activities, the university is focused on the image of a city university that implements educational programs of a special type, providing not only preparing students for life and work in sociocultural environment of human-to-human communication, but also relies on the specific bases in the city for practical work, integrating educational tasks students of all levels with the objectives of the development of the metropolitan metropolis (Moscow State Pedagogical University, 2015).

The mission of the university: to help citizens to meet their educational needs, bringing in their life creativity and professional success (Moscow State Pedagogical University, 2015).

Materials and Methods

Our article presents the results of a theoretical study of the model of university education. To achieve this goal, the following methods were used. Methods of theoretical research: interdisciplinary analysis and synthesis of methodological, socio-economic, pedagogical, psychological, scientific, didactic literature on the topic of research; generalization, comparison, abstraction, forecasting, modeling of systems and processes; the study of normative and program-methodological documents on the problems of education; the study of world pedagogical experience in the field of education. At the first stage, the theoretical background of the study was determined, a methodological apparatus was developed, the degree of development of the problem was revealed, the experience of advanced pedagogical practice in creating educational and new types of educational institutions was studied. This allowed us to determine the strategic directions of the development of educational systems at the present stage. At the second stage, the methodological and theoretical foundations of building a model of the University of Education were determined. The basic structural components of the model of the University of Education were developed, the requirements for the management system of the University of Education were determined.

Analyzing the activities of universities of education in the world, it is possible to single out the following features that unite them:

Intensive academic development, involving a significant improvement in the quality of education through the introduction of innovations in the learning process and the introduction of learning without borders; formation of not only professional, but also general cultural competencies of students, contributing to their successful career; the presence of post-graduate accompaniment programs; the presence of stable relationships at the interregional and international levels; creating a multilingual environment; encouraging students to integrate into multicultural communities (Fedorov, Soloviev, Ilaltdinova, Kondratyev & Frolov, 2018).

The development of research and knowledge transfer implies the achievement of a leading position by the university in research activities in the field of education and pedagogy, the humanities and social sciences; significant progress in the quality and volume of research compared with the universities of its category; development of scientific clusters and joint international research based on long-term partnerships; active promotion of research results in practice, the implementation of scientific results on their own sites and in networking programs (Fedorov et al., 2017)

Infrastructure development and quality management imply the formation of a sustainable material and technical base, effective management, the introduction of new technologies in the organization of university activities, an increase in campus comfort, the introduction of effective personnel motivation systems based on evaluating efficiency and effectiveness, risk management, optimizing service processes, and diversifying sources. financing, the expansion of the positive influence of the university on social processes in society, the realization of social educational projects (Fedorov, 2016)

Exploring the activities of education universities in the world, and systematizing the requirements for modern pedagogical and humanitarian education in Russian Federation, we identified the key elements of university education (See Fig. 1).

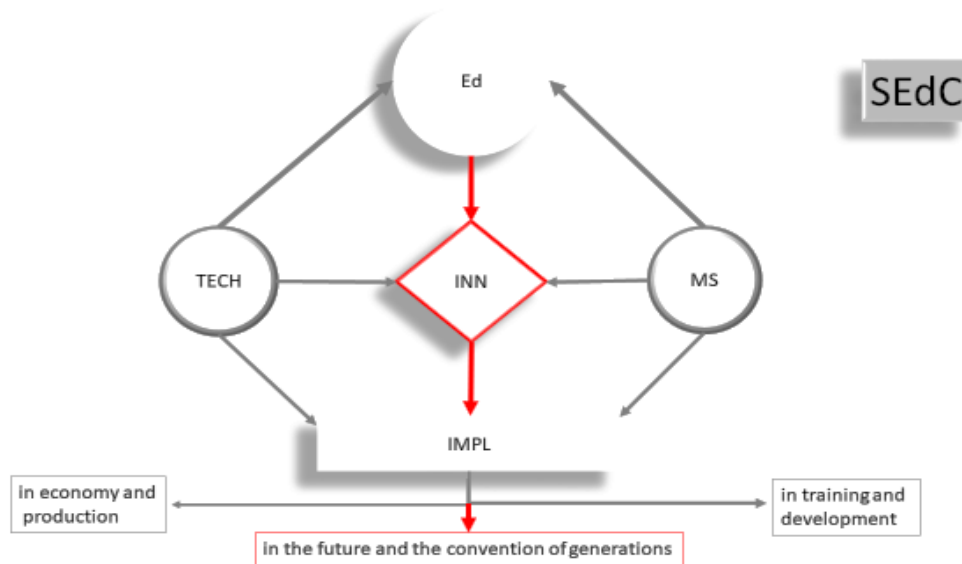


Figure 1: University Model of Education (This is the author's vision of the model of the university universal education, which is described in this study for the first time.)

The main components of the model:

Ed education is the main platform for the transfer of scientific and technological products to the educational process of higher and general schools. It based on high-tech digital and cognitive research, a center for intergenerational interaction and reproduction.

M-S –Mega-sins is a system of communicative transdisciplinary interdisciplinary collaborations with a supporting infrastructure that guarantees a leading reading of the global research and development agenda for 5-6 flagship areas.

TECH - Technologies is a highly productive mobile, labile experimental production site, built according to the Lego principle and capable of quickly transforming itself to any problem of research and development of the Mega-sign cluster.

IMPL - Implications - a system of investment forecasting and accurate implementations; it provides trans-innovative solutions and developments on the scale of three streams: into the economy and production, into training and development; into the future and the “generational convention”.

INN - Innovations - the main effect of the university's activities is that scientific and technical research and development become an open educational product intended for immediate implementation not only in production, but, above all, in the real educational process and implementation in future generations of researchers, engineers, teachers.

University education should be a system solution that includes scientific, technological and educational components with a single communicative space provided by university education. Transfers of innovative solutions to practice are provided at the same time by experimental production sites that create “lego-principle” constructs and are mobile-transformed under the problem of research. At the same time, innovations become the main content of the university's activities and at the same time the basis for innovative solutions in the fields of economics and production, education, and global support for the convention of generations.

The university of education in this form should be arranged as a “thinking machine” and a high-tech logistics complex for creating “new in general” through education. This is achievable only when the goal of the system is personnel design on the scale of generations, intergenerational interaction and management of the future. The system of such a mega-complex should have an integrated cooperative network of open areas “science - technology - education” (high-tech scientific equipment = educational equipment), where there are no forbidden segments for those who teach and study. On this basis, a platform will be created to provide additional education throughout life for the gifted flow of maturation (“decisive children”), creative maturity (“maturing adults”) and the mass segment of education for the training of teachers of the new formation (Fedorov, Ilaltdinova & Frolova, 2018).

The main resource for the activity is people, inter-generational interaction of intellectual elites.

The main product of the corporation should be not specifically subject inventions, but the reproduction of intellectual and pedagogical elites that can create innovative scientific and technological platforms, ideologies, inventions, can teach other people, ensure intergenerational interaction and guarantee a logistically perfect process of creating a supreme product –the formation of the desired future through the convention and the “reproduction” of new generations (Fedorov, 2016).

Organizationally, a university model of education can be implemented if a federal research and education hub of global importance is created for the reproduction and formation of human capital in scientific, engineering fields of activity, and new solutions are generated in the field of professional training and development of teaching staff. Communication within the subsystems should be in the interest of the open pedagogical education of the future (See Figure 2).

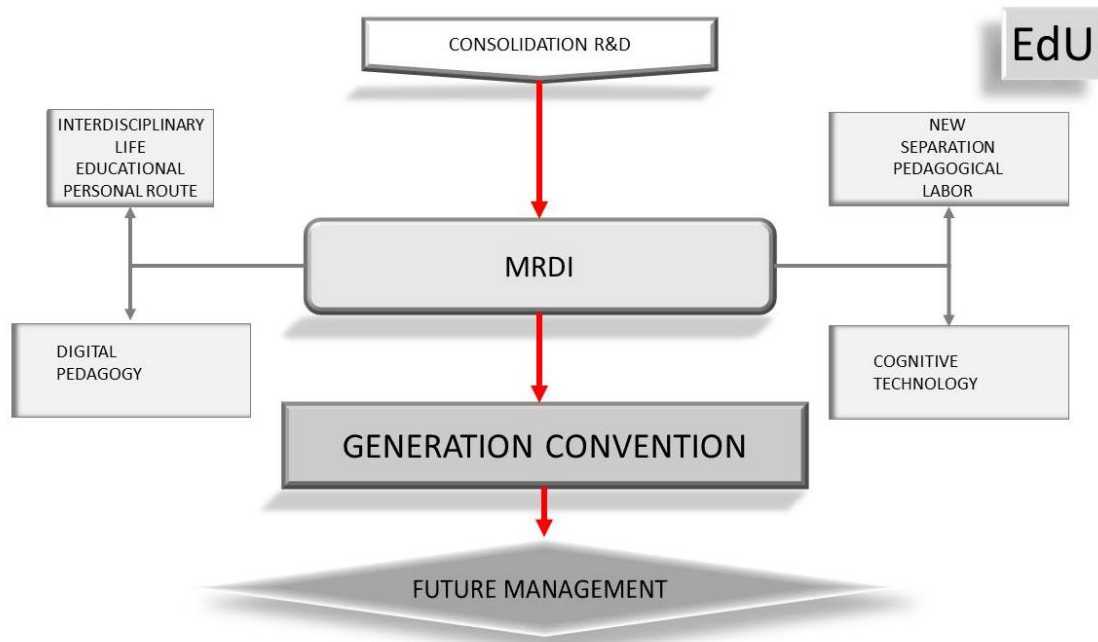


Figure 2: Targets of the University's Innovation Space (This is the author's vision of the model of the university universal education, which is described in this study for the first time.)

Results and Discussions

The proposed solution in the format of a global education platform:

1. The university of education, in contrast to the pedagogical university, research or federal universities, where there is an integrated pedagogical education, performs 4 functions (MRDI - measurement, research, development, impact) (See Figure 3).

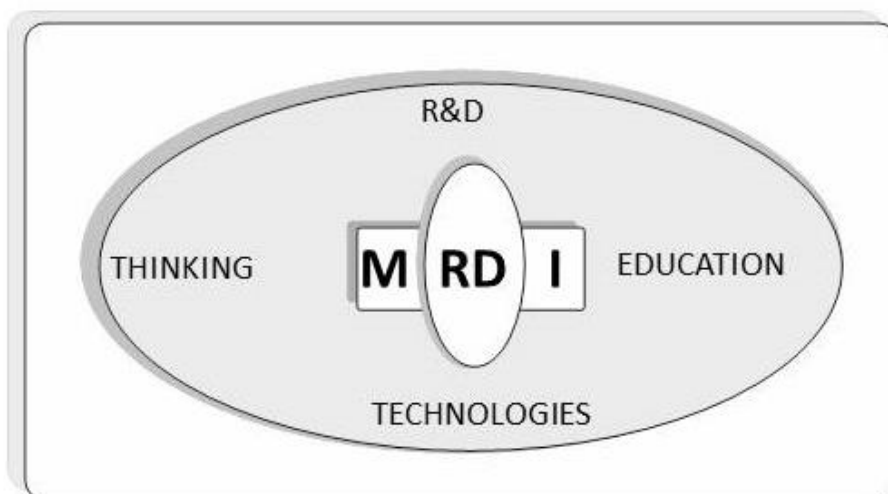


Figure 3: Educational Logistics of the University of Education

- measurements: a permanent service solution for the formation of personnel needs with a planning shoulder of at least 10 years; constant quality monitoring according to the PISA model; a permanent system to ensure support for the life cycle of the teaching profession in two aspects - selection and retention in the education system; accompaniment of career growth and self-development of a mature teacher; the first and second analytics of the educational ecosystem, on the basis of which reliable statistics are formed and research is possible;

- research and development: in the field of education throughout the international agenda with leading educational centers of the world, will provide an opportunity to get away from the "native science" and local science schools in pedagogy; The peculiarity is that cognitive research in the field of education should become the flagship and, given Russian territory, the construction of models of childhood and adulthood taking into account the personal life-education route. In this type of R & D, provided by the University of Education, are characterized by continuous development and updating of educational technologies (a benchmark - a technological thesaurus in the field of education, as it is in the global agenda in the top five QS universities in this area) and educational content in a direct, unconditional dependence on the latest achievements of science;

- impacts: the university of education together with the region manages the "federal center - school" vertical and forms, based on the first two functions, packages of impacts on the system, both in the regional location and on a federal scale. In essence, this function consolidates the mission of the University of Education: an advanced, quick transfer of research and development from leading universities, the Russian Academy of Sciences, world science centers (general education without fail), rating publications to the real educational process through high-tech educational and cognitive solutions. Impacts further concern three streams - childhood and the formation of life-education routes; linear process quality management; teacher development management.

2. The University of Education solves the task of building the "Education Sphere" in a specific location (this solution was developed by the Minin University for the Nizhny Novgorod Region) - a cluster decision to create a Public Educational Corporation in the format of an educational district (Fig. 4).

"Education" - a set of measures and actions that ensure a jump in the superiority of the regional education system on the vertical levels and in their complex interaction:

- formation of a system of continuous education, ensuring the continuous development of human potential;
- maintaining situations of personal growth of students, promoting the region as a "zone of growth of human capital";
- integrity, unity of the educational space of the region, continuity and interdependence of all its components at the managerial, institutional, substantive and organizational levels;
- a significant increase in social comfort of life in the region.

This is a managerial and compositional solution that works to develop a unified continuous education system in the region - the core of innovative transformations and the system that effectively ensures the process of formation and professionalization of the individual.

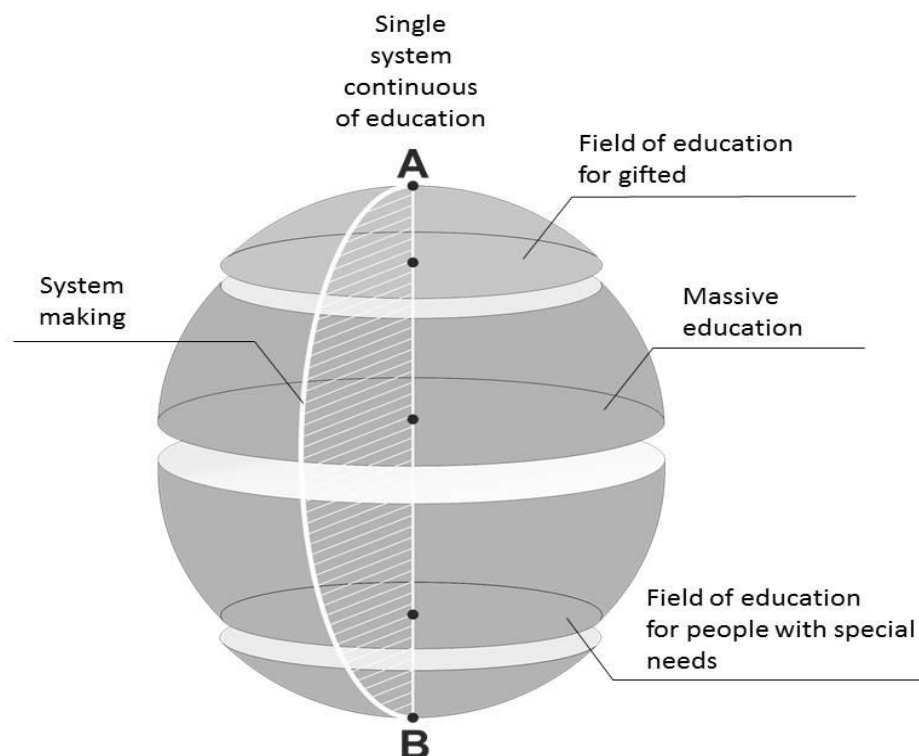


Figure 4: The sphere of Education

Understanding that each level of education has its own specifics and peculiarities, its own problems, we insist that strategic development is the development of the entire educational system in the complex of its manifestations and

levels, requiring a unified approach and common solutions that form an integral educational ecosystem of the region. The main focus of the sphere is mass education. The tasks within this plane are: providing mechanisms for the mutual overflow of students to zones A and B and vice versa, the formation of full-fledged, culturally developed, socially and professionally adapted members of society, regardless of the basic conditions of their lifestyle and world outlook of the family. Exclusive areas of education (the poles of the sphere) carry out work with gifted children and the formation of narrow, specific competences, as well as all types of remedial and adaptation work.

"Dome solution" creates a "body of rotation" - a sphere. Solutions operate at "every point" of education, at every level, the dome structure and connectedness ensures uniformity and balance of effects. The integrity of the "dome solution" implies the creation and mutual use of resources by all subjects of education in the region.

Thus, in addition to traditional functions, university education will undertake a large range of issues related to the development of human capital and improving the quality of life of the population. Enlarged these functions can be defined as follows:

Relational function (relatio - report): the formation in society of attitudes towards education as the highest value that promotes personal development throughout life, the formation of an innovative culture of life and careful consumption. The formation of an individual's personal culture and the support of a specialist in the process of mastering and implementation social functions.

Regulatory function: university education ensures the development and formation of certain standards of behavior and social control in society.

Axiological function: the formation of the system of values of society.

Integration of all interests of society: education has never been and cannot be a separate social institution. It is aimed at reflecting the interests of the whole society, predicts its development and to a certain extent forms the priorities of this development.

The University of Education is a cultural complex for the region, creating new cultural locations, shaping events in the creative and cultural life.

R & D: in the format of a university of education transdisciplinary research becomes available: pedagogy and medicine, pedagogy and sociology, etc. Such a formation is certainly in demand (confirmed by foresight and the relevance curve of world scientific publications) and is not currently sufficiently developed. In addition, the university becomes a hub of ideas of fundamental knowledge, which is very important in the context of the formation of an "applied attitude" to pedagogy, and it will be possible to restore the logic of holistic knowledge.

In a modern regional ecosystem, a university of education is a provider of programs, pedagogical content and leading pedagogical ideas. At the same time, the cluster approach will allow other universities to use this potential and realize solidary continuous development.

The University of Minin has a certain experience in forming a socio-pedagogical cluster and has achieved some results in this area (Fedorov et al., 2017).

The formation of a regional socio-pedagogical cluster began in 2013 in accordance with the cooperation agreement of December 24, 2013, according to which the Minin University is a regional basic university for pedagogical, psychological, pedagogical and humanitarian education in the Nizhny Novgorod region.

Cluster activities are conducted in the following main areas:

- development and experimental testing of new educational content and educational systems, new pedagogical technologies, textbooks, educational and methodical, methodical, educational and laboratory complexes (including educational ones) within the framework of existing standards;
- development and testing of new strategies and mechanisms aimed at modernizing the management of education, including the economics of education;
- the creation and development of new structures in the education system, network interaction of educational organizations and educational systems;
- development and pilot testing of systems for assessing the quality of education, new forms and methods for managing the quality of education;
- development and testing of new forms and means of developing education;
- approbation and implementation of pedagogical innovations.

The main elements already formed and developed in the framework of the regional socio-pedagogical cluster are:

- the system of organization and scientific and methodological support of experimental activities in the format of experimental sites: the system of organization of scientific and methodological support of experimental activities includes experimental sites created by Minin University on the basis of more than 60 educational organizations in the region;

- a system of organizing and supporting the activities of teachers' associations in the region: 17 teachers' associations have been established and function in the region, which are aimed at forming professional expert communities in the region - independent of the institutions they are represented and able to perform the functions of accompaniment and counseling, examination, identification and dissemination of the best pedagogical practices, representation and protection of the interests of the professional community;

- system of organization of practices in the format of clinical practice bases: the university organized the work of more than 60 clinical practice bases - in educational organizations, on the basis of which university students do internships distributed throughout the school year;

- the system of organization and maintenance of basic departments: this mechanism is currently being tested at the university as part of the creation of the basic department of the Nizhny Novgorod State TV and Radio Company, work is underway to create a basic department based on the IAP RAS;

- the system of organization and support of the activity of the specialized psychological and pedagogical classes: in the 2017-2018 academic year, testing of the specialized psychological and educational classes took place; the results of experimental activities in the formation and maintenance of the activities of psychological and pedagogical classes are presented on the federal portal of the Ministry of Education and Science of the Russian Federation; According to the results of the first two years of work of these two classes, a virtual psychological-pedagogical class will open, allowing to attract an almost unlimited number of high school students to familiarize themselves with the teaching profession, regardless of their place of study;

- creation and implementation of a model for targeted training, contract employment and postgraduate support for university graduates;

- creation of a system for calculating the needs of teachers: in 2016-2017 The University of Minin has implemented the state contract "Development of models for the targeted training of teachers in the educational area" Education and pedagogical sciences"; within the framework of the created model, targeted training, contract employment and postgraduate support for graduates, as well as the construction of short career paths for them, are central processes of the regional socio-pedagogical cluster;

- formation and maintenance of the electronic cluster platform: the electronic platform of the regional socio-pedagogical cluster - "E-platform" is a multifunctional and multi-purpose Internet portal that allows you to quickly inform participants and stakeholders about all aspects of the regional socio-pedagogical cluster and offering various categories participants new collaborative formats; In addition, the E-platform is designed to ensure continuous and effective ongoing work of the pedagogical associations-participants, offering them approbation of various formats of educational activities, including innovative ones.

The university has an extensive network of partner organizations in the region. The register of cooperation agreements includes 144 positions and continues to grow constantly.

Since 2017, Minin University is the university center for social development of the Nizhny Novgorod region (as a participant in the priority federal project "Universities as centers of innovation creation space"). As part of the Transformation Program implementation, the University's Minin Center for Social Development of the Region implements activities aimed at combining the efforts of the social and educational activities of the region and promoting the growth of comprehensive involvement of the population and organizations of the region in solving the tasks of sustainable socio-economic development of the Nizhny Novgorod Region and the Russian Federation.

In the framework of the activities of the regional social and pedagogical cluster of the Nizhny Novgorod Region, Minin University developed a number of promising projects.

The training simulator school is a major educational complex, an innovative system of the knowledge industry, in which educational techniques and methods are constantly changing as information on their effectiveness is accumulated. At the heart of the structural component of the school-simulator is an educational organization - a school in which the activity of the teaching staff is based on the transformation of the labor system. Creation of conditions for the formation, testing and implementation of the best educational practices based on the model of division of pedagogical work, to eliminate professional deficiencies and improve the quality of education in the Nizhny Novgorod region, followed by broadcasting to educational organizations of various levels.

Conclusion

The results of the study allow us to draw the following conclusions:

1. Creating a model of the University of Education is based on philosophical, socio-economic and pedagogical ideas. The University of Education develops its own theory, methodology, terminology and scientific methods, systematizes complex pedagogical phenomena and processes, types and levels of education, predictive information for planning and implementing activities aimed at the functioning and development of the educational system.

University of Education is a research-oriented university. Its activity involves a comprehensive system, interdisciplinary study of phenomena and objects of pedagogical reality, determines the approaches to solving existing problems, both in general and depending on the specifics of a particular educational system.

The university aims to find ways and technologies to improve the efficiency of the educational process and the growth of the quality of education at all levels. The objects of research can be both the process of education itself and its "technological equipment" - the methods, means, organizational forms of training, education and development.

2. The objective prerequisites for creating a model of the University of Education are not only the territorial, socio-economic and educational features of the region, but also the manifestation of new trends that are of global importance in all areas of activity, including education.

At the same time, the area of development of university education is not limited to the subject of the pedagogical process and considers the whole complex of problems in the social sphere, especially focusing on the issues of social and educational prognostics and human capital management.

3. Scientifically substantiated and developed a model of the University of Education as a new type of educational institution. Creating universities of education as points of innovation development of educational systems would significantly optimize regional educational structures, strengthen social and educational ties in the region and distribute the load on the resource support of the educational process through interaction within the cluster, ensure the formation and development of competitive human capital at a high quality level, implement innovative services and developments. The University of Education is able to coordinate the development of the education system across the region and district, providing a balanced educational organization with teaching staff, supporting and supporting the professional growth of teachers. The uniqueness of the structure of university education will make it possible to form a short trajectory of honey by developing new scientific and technological solutions in the field of education and bringing the results of intellectual activity to practical application.

References

- Al-Dajeh, H. I. (2012). Jordanian vocational, secondary education teachers and acquisition of the National professional standards. *Education, 133*(1), 221–232.
- Alishev, T., & Gil'mutdinov, A. (2010). Singapore experience: Creation of a world level education system. *Educational Studies Moscow, 4*(6), 227–246. DOI: 10.17323/1814-9545-2010-4-227-246
- Barber, M., Donnelly, K., & Rizvi, S. (2012). *Oceans of innovation: The Atlantic, the Pacific, global leadership and the future of education*. Retrieved on May 5, 2019 from <https://www.ippr.org/publications/oceans-of-innovation-the-atlantic-the-pacific-global-leadership-and-the-future-of-education>
- Barber, M., Donnelly, K., & Rizvi, S. (2013). *An Avalanche is Coming: Higher Education and the Revolution Ahead*. London, UK: Institute for Public Policy Research.
- Belyaeva, E. M. (2014). *Professional standard of the teacher (Concept and content)*. Retrieved on May 5, 2019 from <http://nsportal.ru/shkola/materialy-metodicheskikh-obedinenii/library/2014/12/26/professionalnyy-standart-pedagoga>
- Danilova, L. N. (2018). Educational Leadership of Singapore as a Sociocultural Phenomenon. *Yaroslavl Pedagogical Bulletin, 3*, 55–62.
- Darling-H., L., & Rothman, R. (Eds.). (2011). *Teacher and Leader Effectiveness in High-Performing Education Systems*. Washington, DC: Alliance for Excellent Education / Stanford, CA: Stanford Center for Opportunity Policy in Education.
- Efimov, V. S., & Lapteva, A. V. (2013). Forsyth Higher School of Russia - 2030: The basic scenario - the "conversion" of higher education. *University management: practice and analysis, 3*(85), 6–21.
- Fedorov, A. A. (2016). New pedagogical education from the support and maintenance of the life cycle of the profession "teacher" to the convention of generations. *Accreditation in education, 8*(92), 18–21.
- Fedorov, A. A., Ilaltdinova, E. Yu., & Frolova, S. V. (2018). The Convention of Generations" in the new world of education. *Higher Education in Russia, 27*(7), 28–38.

- Fedorov, A. A., Paputkova, G. A., Filchenkova, I. F., Ilaltdinova, E. Yu., Prokhorov, I. V., Krasnopevtseva, T. F., ... Perevoshchikova, E. N. (2017). *Target training of teachers: a model of a personnel designer of a regional socio-pedagogical cluster*. N. Novgorod, Russian Federation: Minin University.
- Fedorov, A. A., Soloviev, M. Yu., Ilaltdinova, E. Yu., Kondratyev, G. V., & Frolov, S. F. (2018). *Age structure of the pedagogical community: analysis and forecast of development*. N. Novgorod, Russian Federation: Minin University.
- Frassinetti, P. (2014). *Plano estrategico 2015-2017*. Retrieved on May 5, 2019 from http://esept.pt/a_univ/PE_ecra.pdf
- Frassinetti, P. (n./d.). *Academia de sabers. Programa Golden Age*. Retrieved on May 5, 2019 from http://esept.pt/a_acad_sab/gold_age_18.pdf
- HSE. (2019). *Strategic Development Programme*. Retrieved on May 5, 2019 from <https://strategy.hse.ru>
- IOE. (n./d.). *Institute of education research 2015/2016*. Retrieved from <http://www.ucl.ac.uk/ioe/research/pdf/IOE-Research-2015-2016-Brochure>. Accessed 5 May 2019.
- Kelly, K. (2017). *Inevitable. 12 technological trends that determine our future*. Moscow, Russian Federation: Mann, Ivanov and Ferber.
- Luksha, P. (2013). *New personnel for the new economy: the results of the Foresight "Competences - 2030"*. Retrieved from on May 5, 2019 <https://www.slideshare.net/PavelLuksha/skills-of-the-future-for-russia-2030>
- Moscow State Pedagogical University. (2015). *The development strategy of the Moscow State Pedagogical University State Autonomous Educational Institution of Higher Education in Moscow for the period up to 2020*. Retrieved from <https://www.mgpu.ru/wp-content/uploads/2017/04/1492608475-Strategiya2020.pdf>. Accessed 5 May 2019.
- Myalkina, E. V., & Zhitkova, V. A. (2018). The system of integrated assessment of administrative and management personnel at the university: practice and features. *Vestnik of Minin University*, 6(1), 1–17.
- Peskov, D., Luksha, P., Savchuk, I., Kozharinov, M., & Kartaeva, E. (2017). *Education 2030: road maps of the future. Results of the first Russian stage of research*. Retrieved on May 5, 2019 from <http://www.myshared.ru/slide/214897/>
- Schwab, K. (2016). *The Fourth Industrial Revolution*. Geneva, Switzerland: World Economic Forum.
- Sedykh, E. P. (2015). Retrospective analysis of the leading ideas of the development of socio-pedagogical systems. *Vestnik of Minin University*, 4(12), 22–30.
- Sedykh, E. P. (2017). Logical and structural approach to the management of educational projects. *Vestnik of Minin University*, 2(19), 6–14.
- Serra, M. (2016). *Girl with a finger*. Moscow, Russian Federation: Hell Marginem Press.
- Shehla, A. Ya., & Sadia, A. (2018). School Dropout of Rural Girls in Pakistan: Exploring the Role of Gender Discrimination. *Journal of Research and Reflections in Education*, 12(1), 1–10.
- Zamanov, R. I. (2014). Education in Singapore: the quirks of a third world country or a lesson in building an innovative society? *Journal of the head of the management of education*. 3(38), 1–6.