

## INNOVATIONS IN UNIVERSITY EDUCATION IN THE CONTEXT OF MODERN GLOBAL CHALLENGES

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### Abstract

This article reveals the mission of universities in the context of global changes and new challenges of our time. The idea that society enhances human capital and competitiveness through the development of education, science, and innovation is grounded. Intellectual capital is a real resource accumulated based on the human, social potential of society. In this context, the role of universities, as research and educational centers, as a special academic environment in which students receive deep professional knowledge and are formed as individuals with a high culture, is being actualized. It is suggested that a higher school at the present stage should be ready to train gifted and already very well trained applicants, meet their needs and provide a high-quality level of teaching.

The authors emphasize the need of cultivating knowledge in the modern world. The idea of person's improving and technological progress now more than ever takes root in our minds - to be competitive, you need to be able to do what you will need to do tomorrow.

The article holds the idea that the 21st century is embraced by such a trend as accelerated obsolescence of experience. Technique and science, progressing with astonishing speed, contribute to the obsolescence of a large number of phenomena and, accordingly, human experience in certain areas. Universities are becoming a kind of hubs of the modern professional world - knowledge is always insufficient, skills are not very developed, skills require even more practice.

The results of an empirical study of the ideas about successful learning and the features of the perception of the problems of successful learning by subjects of the educational process are presented. The perception of the success of the educational process at the university is similar among respondents (graduates of various universities and specialties); respondents emphasized the social factor of success.

In order to be successful, it is not enough just to have a knowlrdge, it is also necessary to be able to do what others are unable to do. New technologies are increasingly being introduced into the everyday area of human's life. In such conditions, the value of a person's unique creative activity rises. Higher education in Russia and Kazakhstan responds to these challenges of our time, realizing the need for a new methodology and the introduction of alternative teaching methods. Therefore, the Ural Federal University since this year is changing the forms and content of training, moving to a mixed format of training on online platforms and project forms.

All of the above indicates that a modern person needs to have knowledge of a new format. Our era puts forward new, sometimes seemingly unattainable requirements for a person as a professional. That is why the cult of knowledge is not only a factor of competitiveness, but also a factor in the existence of modern

man.

**Keywords:** university education, global challenges of our time, the success of training.

## INTRODUCTION

The socialization of modern youth occurs in the context of major social transformations that affect all spheres of society. Globalization and technologization, the development of popular culture, and socio-economic processes contribute to global changes in the system of value guidelines and attitudes of the entire population, which affects, first of all, young people.

The role of education in youth development is recognized by the international community as decisive. Realization of youth rights to education is an important condition for achieving the Millennium Development Goals, achieving the objectives of the World Program of Action for Youth (WPAY), and the high level of competitiveness of national economies within the framework of the Global Competitiveness Index of the World Economic Forum, an indicator of human development in the framework of the United Nations (The Human Development Index HDI), an important indicator of youth development as part of the Global Youth Development Index.

The 21st century has generated a number of educational trends that are global, united and independent of geopolitics. Both in Russia and Kazakhstan, global challenges to modern education can recognize such trends as:

- Accelerated obsolescence of experience. Technique and science, progressing with astonishing speed, contribute to the obsolescence of a large number of phenomena and, accordingly, human experience in certain areas. Universities are becoming a kind of hubs of the modern professional world - knowledge is always insufficient, skills are not very developed, skills require even more practice.
- The policy of state deregulation of the university system, giving it greater authority and autonomy. At the same time, there is a decrease in the share of government spending in meeting the needs of higher education institutions. This is a characteristic feature of recent decades for the vast majority of developed countries in the world, and especially for countries with economies in transition [4].
- Accessibility and popularity among students of information and communication technologies provokes virtually revolutionary changes in all aspects of the activities of universities, to which the university community should give an adequate response.
- Actually globalization as the basis for the internationalization of the system of higher and postgraduate education. This process includes inbound and outbound mobility of students and faculty, the development of joint educational programs, massive open online courses, joint research projects. The key direction of state policy in the field of internationalization of Russia and Kazakhstan is the development of academic mobility of students.

According to J. Knight [2], the system of higher and postgraduate education in Russia is in a transitional stage from the first to the second stage of development of internationalization; in Kazakhstan - in a state of transition from the second to the third stage. To ensure the transition to the third stage - positioning as an educational hub - it seems necessary to form a single national strategy for the development of internationalization.

First step

- ✓ Academic mobility of students and faculty
- ✓ Student mobility to foreign universities for education
- ✓ Faculty mobility for teaching and research

Second phase

- ✓ Mobility of programs and providers
- ✓ Mobility of educational programs and their providers

Third stage

- ✓ Educational hubs

- ✓ Attracting foreign students, researchers, educational programs, training providers, research companies for training, knowledge production and innovation development
- Changes in the labor market: a formal academic or academic degree is no longer relevant to employers. The greatest interest of employers is caused by people with specific professional skills. The answer to this challenge in modern conditions is non-formal education. The understanding of the importance of non-formal education in Europe came in 1999.

Non-formal education has found widespread development within the framework of Lifelong Learning Concepts (Lifelong Learning, LLL) and Life Width (Lifewide Learning, LWL). As educational strategies, these concepts appeared about three decades ago thanks to the efforts of UNESCO and the Council of Europe, and provide for the development and improvement of knowledge, skills of people who don't want to stop at the achieved level in their professional development. An example of using the «Open badges» model in the educational space of Kazakhstan demonstrates just the relevance of the applied results of the educational process (pic.1).

Picture 1. Open Badges System



Among the global challenges, the most significant for education is the growth of dynamics, uncertainty and unpredictability of the world, which is usually called «time compression». Economic competition in the global market and innovative technological development set not just a high, but constantly growing pace of life. According to 2017, up to 80% of technologies become obsolete in 10 years. However, since then the pace of technology obsolescence (and, accordingly, the emergence of new ones) has accelerated even more.

Education is obliged to respond to this challenge: one of its leading tasks is preparing a person for life in the face of constant, sometimes unpredictable changes. In this regard, innovative training has emerged, which is defined as oriented toward creating a person's readiness for rapidly advancing changes in society, readiness for an uncertain future through the development of creativity, various forms of thinking, and the ability to collaborate with other people.

The assertion that the life cycle of a cultural norm or a norm of professional activity exceeds the life span of a generation is now invalid. In a world where adults change their profession several times during their lifetime, the way of life itself becomes different - education must also be different.

Thus, modern universities, in all their diversity, exist in a unique social situation the onset of the digital era. For the first time in the history of humanity in the classical universities of all countries, it is postmillennial

generation of – digital natives. Universities have entered a period of acute crisis due to extreme contradictions between the traditional device of the University and its current challenges in a digital world. «In a short time the world has experienced profound globalization processes. Now next coexist different cultures, elements of the counterculture actively penetrate more recently, the dominant social traditions, making them a dubious, shaky. Today it is not known what cultural and national spiritual values to reproduce and to produce» [5]. Actually, writing about this and other researchers: «the new mission of the University is to fulfil its integrative possibilities. However, to be a mediator, a mediator in a modern society, losing its integrity, can only transforming the University» [1].

The question is to determine the right direction of the transformation of the university, which would meet the social order for education. The demand for quality education among youth values remains very high.

## METHODOLOGY

The team of authors attempted to look at the necessary transformations in higher education from a different angle, namely, «through the eyes of the client», i.e. student. Focusing on the requirements of employers, it, in turn, makes other requests for the content and quality of the educational services offered. In May 2019, in the universities of Yekaterinburg (UrFU, Humanitarian University, Institute of International Relations, Medical Institute), a study was conducted on the opinion of university students on the topic «Opinion on higher education of graduate students» (n = 431). Table 1 presents the results of a survey of students from universities in Yekaterinburg.

**Table 1**  
**The problems that most concern youth today**

Problems	Frequency	% of responses
How to find a good job	213	23,4
How to succeed in life	55	23,4
How to create your own business	110	12,7
How to get a quality education	116	13,9
How to ensure the safety of your family and friends	96	10,1
How to get quality medical care	64	8,0
How to become a leader, become respected in your community, among peers	52	6,1
How to gain understanding from relatives	23	2,3
Amount:	729	100,0

The first three places are occupied by questions of self-determination, but students put the fourth place in the list of priorities of high-quality education, although health problems in previous youth monitoring (2016-2018) occupied the first place among the indicated values. Suppose that in the minds of students, education becomes an understandable tool for achieving good work, success in life, and one's business.

It is logical that higher education claims to be present on those information platforms where significant events of the formation of the new elite of society take place. The most optimal model of innovative education can be implemented within the framework of classical universities that have a number of necessary qualities: 1) combining undergraduate and graduate programs in one educational cycle, which allows graduates to receive wide professional training; 2) a university set of subjects that allows you to get a kind of specialization, characteristic of this specialty; 3) the impact of the culture of university teachers; 4) the possibilities of new teaching technologies, interactive forms - trainings, business games, case-study, etc .; 5) university professional optimization, which allows to improve the quality of professional training of future specialists, taking into account their psychological inclinations and inclinations; 6) the university «cultural capital», which allows you to correct the defects of the general cultural training of future specialists.

It is obvious that the university today remains an issuer of spiritual values and scientific knowledge, but the ways of forming the carriers of these two entities in the information society require modernization. What do the main subjects of educational activity, entrants and students, mean when they update the request for quality education?

Above indicated study also included focus groups, which allowed to highlight the following problem areas

identified by students:

**Table 2**

Factor rank	Problem areas highlighted by students	Factor weight from 100%
<b>What excites you the most?</b>		
1	The problem of self-determination, how to find yourself	17
2	How to get comfortable after graduation	13
3	Relations with the opposite sex	13
4	It is hard to study according to university requirements	12
5	Material problems	11
6	Destructive entertainment	8
7	Family problems	6
8	Uncertainty about tomorrow	5
9	Lack of purpose in life, inability to find oneself	5
10	Idleness, unemployment, lack of spirituality of youth	4
11	How to improve the quality of housing / accommodation	3
12	The crisis in the country, the mood around	3
<b>Why did you choose this particular specialty?</b>		
1	Calling, abilities, interest in this specialty	58
2	Demand, job security	10
3	I chose a university, the specialty is not so important	7
4	Where did they get where they managed to pass on the exam points	6
5	Parent Advice	5
6	Family traditions, professional dynasty	3
7	The school is closer to home, convenient to get to	3
8	Difficult to answer	8
<b>In the future, do you plan to work in your chosen specialty?</b>		
1	In the specialty I receive	63
2	On the other	20
3	Difficult to answer	17
<b>In your opinion, and what should young people be taught at universities?</b>		
1	Professional knowledge	44
2	Communication skills	25
3	How to find yourself in life, become a guide for self-determination	15
4	Project thinking, organization skills	11
5	Strategic thinking	5
<b>What do you dislike about studying at a university?</b>		
1	Unsuccessful, unsuccessful teachers	20
2	Outdated Learning Content	19
3	Irrelevant, boring forms of training, obligation	17
4	Formalism and disinterest in youth opinion	17
5	Lack of contact: youth on their own / teachers separately	5
6	Inadequate material resources	12

## RESULTS

The results look logical and convincing, if we evaluate them through the prism of the specifics of youth today.

Modern algorithms for survival and success in youth have changed significantly, which formed generational differences and drew the line between older generations and young people, who are forced to form and master the "new rules" of the game.

In a traditional society with a low life expectancy, generational change is very fast - in just 12-15 years.

However, life expectancy increases, accordingly, the period of active life increases, and the term of childhood and youth extends. In this regard, the generational change has slowed down very much. The Millennial Generation is a generation of people who have reached the age of early social maturity by the turn of the millennium. That is, those born in the late 70s - early 80s. The current twenty years are the so-called centennials, generation Z. These two generations differ from each other. A person of 45 years old may well have a child of 20 years old - this is a social norm. However, a modern man of 45 years old is also not a gray-bearded old man, but full of vitality, in the prime of his social maturity. Thus, youth expands the period and it can be stated that the concept of generational change is becoming obsolete.

According to the theory of generations, the conditional sociological group «youth» (14-30 years old) includes representatives of generations Y and Z, or the Millennium generation, Next (their birth years are from about the 90s to the beginning of the 2000s). These generations demonstrate important features:

- The time of childhood and growing up these young people had on events such as the collapse of the Soviet Union, terrorist attacks, military conflicts, rapid development of communications, digital technologies, Internet, mobile phones, several economic and political crises. Because they rely on themselves, short-term gain, categorical;
- The external environment around them was changing very quickly during the period of their maturity, speed of development is very high. Growing up in such an environment, people "equipped with" clip thinking. skills surface, but the rapid mastery of large volumes of information, categorically. Their traits – the desire to obtain immediate payment for work done, the absolute lack of faith in the long term – logical. Indeed, in their lives, in addition to rapid change, nothing happened. They don't know any other life.
- Millennials grew up in times of abundance, and their ideas about what work is, how it should be done and how it should be rewarded are at odds with the older generation, whose representatives run most of the companies. Therefore, the motivation "to work for ten years in the organization so that your work is rewarded with a prosperous life" is meaningless for them, because they believe that in ten years we will live in completely different conditions. Hence, a lack of understanding of subordination and the need to obey, the search for convenient conditions for an interesting job, confidence in one's own worth, the ability to think "differently", creativity;
- Millennials live in a new digital world where thanks to the rapid scientific and technological progress, the barriers between the physical and virtual world almost collapsed. This is the era of publicity — and all presented in the Internet. Moreover, globalization, the blurring of borders and the leveling of national differences and traditions. Hence the desire of the personification – and the desire to contact; to be "in touch" and the ability to build communication "live". This generation of the necessary presentation sets them apart from the crowd – and gadgets to communicate. In this case, any information, image speaking, is a clique, making them confident users, scholars, able to operate information fields. Their values – freedom, fun, performance.

This kind of new generation is dictated by the specifics of growing up, and therefore logically "fit" into reality. However, they also create conditions in which young people are less self-sufficient and looking for social support, and also subject to the risks of social deviations.

In a study that was recently done for Sberbank [7], there is an interesting point: one of the few complaints that young people present to parents what they do not say how to live, do not give units. The position of today's young parents: «I don't know how to, they maybe know better than I do». For the first time in the history of mankind, the next generation is more informed than the previous one. Training is in the reverse order, and it is nonsense, the explosion of the brain, because all our culture is built on the fact that the previous generation passes on the experience to the next.

Such a transfer of experience is characteristic, first of all, for an agricultural society, where there is practically no innovation, and experience is more important than creativity. After the successive waves of industrial revolutions began, and the great geographical discoveries expanded the horizons of humanity, a situation arose when the next generation is better oriented in changing conditions than the previous one.

But usually during the time when living conditions changed, these new generations themselves managed to become adults and parents. For such a short time period, this phenomenon is observed for the first time. This is a very interesting, new and not very similar phenomenon [6]. In a traditional university, the teacher was one of the carriers and translators of information. A traditional lecture was understood as a message of some sacred knowledge, the only source of which was a teacher. The teacher was guided by the information that he drew from books, experience and teaching. This model has existed since the advent of

the first universities. Now, when any information is available to the student at the moment when he made the request online, often right at the moment the teacher informed her, the lecture form of classes with students became meaningless. Perhaps, in its form, its existence is justified - it is a lively dialogue with students, but substantively - it needs a fundamental correction. In our opinion, the knowledge and information transmitted by the teacher to the student, evoking his lively response and stimulating independent study of the subject, is not factual knowledge, but reflective. Actually, all the student's learning comes down to stimulating the motivation of an independent search for information and teaching critical, selective analysis of the received.

The neurotic desire to put skills and abilities into a young man so that he is prepared for life has been replaced by a feeling that nothing can be installed in him, because we do not know how the world will change tomorrow. The idea that before 21 you learn everything you need to know, and then only work on this fuel, already looks utopian; however, those who received a good education in their youth still have an advantage - they have more neural connections and their brain is better adapted for further learning. Today, the idea of learning throughout life, upgrading qualifications, getting a new specialty is relevant.

Learning as reproductive assimilation, training is a legacy of previous years, it is much more important to develop young people's ability to negotiate, create and maintain relationships, organize processes, confidence, acceptance, and other soft-skills. Alexander Arkhangelsky<sup>1</sup> claims that the main thing he wants to teach students is the ability to act in a new way and seek a way out in new situations: for we cannot give the full amount of knowledge, because they will become different, but we can teach to adapt to changes.

However, according to psychologists, the main obstacles to success in life and happiness are not lack of skills and knowledge - they are acquired, but their own psychological deprivation. Young people are disturbed by anxiety, fears, obsessive-compulsive disorder, a tendency to anorexia, and so on. If all of this does not happen, if the person is psychologically healthy enough and well-off, then he will achieve everything he wants. As Aristotle said, take care of the tears of your children so that they can shed them on your grave. Raising a healthy personality without deprivation is the task of modern universities.

From here follow the new requirements for university education. With this approach to university knowledge, obviously, a fundamental correction of the whole system of teaching methods and the selection of teaching staff is required. The Ural Federal University named after the first President B.N. Yeltsin and the Kazakh National University named after Al-Farabi have made certain efforts in these areas. First of all, an attempt is made to provide students with individual learning paths that meet their own educational goals. But it is extremely difficult to get away from the traditional stream-group method of training, primarily for economic reasons. However, a big step forward here is the introduction of online training in some disciplines. However, the big problem is precisely the point-based, reasonable, cautious and thorough selection of subjects that allow such training without prejudice to the competencies formed by students. A similar experience at UrFU is only taking shape, it can be welcomed, but the time for reflection has not yet come.

Another critical method is project training. From the study of design in the paradigm of traditional studies to the transition to independent project activities with all the attributes of a real project, with its protection instead of an exam. In the Ural Federal University this year, a pilot project was launched at some faculties, which required the correction of all curricula and existing ties with employers. Project activity, being synthetic in nature, allows students to form soft skills that are in high demand at the moment, along with purely professional ones, in an optimal way.

The fact that it is in the interests to join the operations in the direction of developing educational, creative and business relations between UrFU and different country in the field of economics and business; tourism and hospitality management; ecology and environmental safety management; IT; physical culture and sports; organization of work with young people.

With this in view the Parties will consider the possibilities for:

- Exchange of undergraduate students for doing student, degree and research works on subjects of mutual interest;
- Exchange of teaching staff for lecturing, conducting seminars, as well as joint supervision of carrying out student works and graduate student researches;
- Exchange of training and methodical literature, teaching plans and curricula;

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- Agreement of curricula and teaching programs with the purpose of working out combined educational “double diploma” program;
- Arrangement and conducting of joint seminars, conferences, exhibitions on subjects of cooperation;
- Preparation, realization and publishing the results of possible mutual researches in periodicals by the Parties, as well as in Internet;
- Organization of International Summer term courses for students from UrFU in Ekaterinburg and/or in;
- Preparation, organization and holding of international sports and youth events.

The most painful moment in the transformational trends of universities, of course, is the situation with the teaching community. At this point, we have the classic resistance of the professional community to mature reforms. The unwillingness of the community to radically change the content of professional activity - from relaying knowledge to producing and reflecting on the experience of applying this knowledge. The teacher is primarily a subject who has gained experience in the practical application of knowledge and experience in reflecting on this activity. Which, in fact, is valuable and unique. This is what attracts students in a situation of wide availability of knowledge itself. Obviously, a wide discussion has arisen in the teaching community on this problem. At the same time, the development of new professional standards and requirements for university teachers is necessary.

International cooperation in conducting applied research to improve the quality of training of future specialists in the field of work with youth, the development of academic mobility is one of the priority areas of the Department of Youth Work Organization of the Ural Federal University. Areas of applied research, in particular, are:

- Critical reflection on the birth of youth issues in dynamic conditions;
- Cultural and civilizational prerequisites for changing the terminological characteristics of younger generations;
- Demarcation of problem situations of adolescents and youth;
- Identification of the general and the special in status positions and role-playing performances;
- A look at youth as a problem of society;
- Analysis of demographic fluctuations and social crises as a set of external factors that determine the demand for youth in society.

The key role of social symbols in understanding the behavior of youth is the “horse” of trend research at the Department of ORM UrFU [3].

## **CONCLUSIONS**

As for the external activities of universities, their new task is to integrate into the economic and cultural environment of the region, being a full partner of both civil society and business entities. Providing scientific support for the activities of those and others and producing a specific cultural and spiritual environment of the local community.

So, new challenges give rise to the search for adequate answers to them that today and have to do managers, academics, adepts of higher education is to heavy, daily work to transform our high schools. The transition to the information society creates a new environment and new rules of behavior, including attitudes to education and choice of profession. It primarily affects the young generation.

All the above indicates the necessity of knowledge of a new format for modern man. Our era brings new, sometimes seemingly unattainable demands on man as a professional. That is why the cult of knowledge is not only a factor of competitiveness, but also factor in the existence of modern person.

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