

SOCIAL STATUS OF SCIENTIFIC ACTIVITY IN THE MINDS OF THE YOUTH OF KAZAKHSTANI.

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Abstract

This article considers the social status of science and education, and the factors of its formation in cases of higher school in the Republic of Kazakhstan. For a better understanding of social status and image of science in the consciousness of young people, a sociological survey was conducted among pupils and students of the Republic of Kazakhstan. In addition, the article discusses the problem in attracting young people to science and their solutions.

Keywords: Science, social status, young scientist, the higher school (University), studentship, magistracy

Introduction

In conditions for the development of an innovation economy – a knowledge based economy–, the most valuable and significant condition is its intellectual resources. This is because modernization of all spheres of modern society directly depends on science and innovation, which are the main factors for the progress of all forms of human activity; thus it fosters technical and social development, and the maintenance of public consent. Intellectual economy requires high level of professionalism which is based on knowledge, experience, skill to transfer this experience to future generations, able to save traditional scientific school, develop and maintain new scientific directions and educating young scientists and specialists.

The capitalization of knowledge in conditions of the intellectual economy will require a significant investment of funds in the development of science and education in human development, and therefore, will contribute

to enhancing the prestige of higher education, the prestige of teachers, scientists and intellectuals in receiving fair pay for highly skilled labor. As shown by the experiences of economically developed countries, the growth of expenditure on research and scientific development has accordingly increased the absolute numbers of personnel performing scientific research, and their high social status is an indicator of socio-economic development of the state and the efficiency of its scientific and technical policy.

The problem of attracting the scientific sphere of the talented youth is connected with the increase in the social status of science as social and professional activities. Science is not only a form of public conscience which is aimed at the objective reflection of the world and supplying humanity understanding of the rules, but also a social Institute. Social Institute is a component of the social structure specializing in the satisfaction of public needs, on the basis of a joint activity of people in the satisfaction of the measure of measurement, which can serve as the social situation in the system of the social organization of the life of people.

The status of science in the modern society is very high. Man trusts science more than any other form of social consciousness. It affects the needs of the society. Hence, any innovation today requires a scientific substantiation, and all the benefits and technical achievements of modern civilization rely on science. Having in mind the high social status of science, modern society have taken responsibility for the failures and misfortunes of mankind, considering it as the most important factor regulating social processes.

Science is developing the scientific community and it implies a certain social organization of scientists and advanced communication systems. In modern society, there are a variety of publications, organized conferences and congresses, where scientists can report their conjectures, hypotheses and discoveries. However, the scientist always represents a specific socio-cultural environment.

The research activity for modern society is a very important activity, without which the development of the society and the solution to the many problems of the society will be impossible. By the end of the XX century, the number of scientists in the world has reached 5 million people. Today, science includes 15 thousand disciplines. Thus, about 200, 000 scientific journals are published in the world today, and out of them, 40,000 have been given credits. (Korableva B.G., 2006)

However, since social status in modern society is becoming more important than the sphere of professional activity, this phenomenon should be given more attention.

Methods

To study the social status and image of science in the youth's consciousness research, the institute of socio-pedagogical researches of Kokshetau University named after Abai Myrzakhmetov conducted sociological research among schoolchildren, students, undergraduates and graduates, and young professionals in May to September 2013.

More than 700 respondents was given questionnaires, and 679 of them gave answers to the questions, among which the participants represented: Kokshetau State University named after Valikhanov, Kokshetau University named after Abai Myrzakhmetov, Kazakh National University named after Al - Farabi, Kostanai State Pedagogical Institute, Kostanay State University, Karaganda State University, College students, senior pupils of secondary schools and young specialists University graduates.

The organizers of the survey questionnaire did not only use handout in circulating the questionnaire, but also posted it on the Internet for all wishing to take part. Above all, compatriots – student's scholars, who were awarded by the President of the Republic of Kazakhstan on the program «Bolashak» from the USA, Singapore, Israel, Russian Federation and France, were also part of the organizers.

In the survey, 278 boys and 401 girls aged: 17 to 21 years (60.5%), 21 to 25 years (16%), and from 25 to 36 years (23.4%) of respondents participated. The respondents were submitted by the following groups: older pupils- 4.6%, students of specialized secondary school - 13%, students and undergraduates - 61.5%, and 20.7% were young professionals.

Results

In the conditions of crisis processes observed in structures by the Ministry of education and science of the Republic of Kazakhstan, domestic higher school has become the main institution where new generation of scientists emerges. Higher education institutions bear the responsibility not only in the quality of preparation of scientific staff, but also that of their labor employment and career mobility. Also, the Success of Kazakhstan science is possible only when it is not been formed by the young generation of scientists and researchers, but also by other types of competences, demanded by the conditions of the innovative economy, societies of knowledge and the global labor market. Meanwhile, by results of poll, only 21, 8% of respondents have experience on research work, and 57,7% had no experience. Hence, it is in the course of training that 20,9% explained that in everyday life, such experience is not necessary.

Describing the experience of the research activity; young people, different age groups and social statuses used various forms of scientific work as shown (Table 1) below:

Table 1. Forms of scientific work in which respondents participated in the last three years⁹⁹

№	Forms of scientific work	all in percentage (%)	age groups			
			older pupils	college students	master students	young specialists
1	In basic research	6,0	-	-	-	6,0
2	In applied research	18,7	-	-	1,5	17,2
3	In exploratory research	24,8	1,9	1,5	10,2	11,2
4	In scientific research	8,2	-	-	-	8,2
5	Participated in scientific competitions, projects	11,5	0,8	1,2	6,8	2,7
6	Wrote a scholarly article	13,1	0,3	1,5	4,2	6,1
7	Wrote a thesis	23	-	-	12,5	10,5
8	Wrote his master's thesis	3,2	-	-	1,5	1,7

Generally, as a rule, research activity is peculiar to young specialists, and it ended in higher educational institutions as a result of writing of qualification works, which allows them to take part in applied researches: self-supporting – 26,2%; initiative projects – 13,8%; and within a higher education institution profile – 18%.

Thanks to this experience of which 21,6% of the respondents declared that science is a vital need for them as in a professional and social sense; and 11,5% declared – «perhaps yes». However, 16,2% of respondents do not appreciate scientific activity, and 43,6% answered – «perhaps, no».

In many aspects, negative image of science can be explained with answers to the question: « How far are you satisfied at the moment?: ...» (Table 2).

Table 2 Listing of answers to the question: «How far are you satisfied at the moment?: ...»

How satisfied are you at the moment?	Versions of answers				
	completely satisfied	satisfied	not satisfied	Completely not satisfied	It is difficult to answer
Their place of work	3,4%	7%	3,1%	5,7%	1,5%
Content of their work as a whole	2,2%	6,6%	6,3%	4,3%	1,3%
Relationship with colleagues	2,8%	5,6%	4%	6,9%	1,5%
Relations with management	2,65	4,3%	4,7%	6,9%	2,2%
Terms of their professional activities	1,7%	3,8%	6%	7%	2%
Logistics of his career	1,7%	3%	7,2%	6,3%	2,3%
The ability to use modern information	7,9%	6,2%	4,3%	1,6%	0,7%

One could point out a few options and / or enter your

technologies					
The possibility of commercialization of their research activities	3,1%	1,7%	6,2%	4,4%	5,3%
Terms of remuneration	2%	5,1%	2,8%	3,5%	7,2%

The analysis of the results showed the general attitude of young people, which are satisfied with scientific knowledge, and which are offered modern education system. On the question «Whether you are satisfied with scientific knowledge which are offered today by a modern education system?» It was completely satisfied for 15,1%; and rather satisfied for 16,9%. Also, negative tendency as an indicator of satisfaction is noted by scientific knowledge: 36,4% of respondents are not satisfied with the quality of education and 43,7% estimated the quality of acquired knowledge in higher education institution in the specialty to be weak. Furthermore, they explain their approach of knowledge, when the main form of education are lectures (50, 8%), while project activity with elements of research activity were present at the consciousness of only 15,7% of respondents.

The current state of science and education does not satisfy 32, 1% of respondents. Thus, exit from the created situation by majority of them can be seen in system of actions such as:

- Creation of scientific student's laboratories for the development of real projects;
- Involvement of seniors of schools for participation in the Olympiad in subjects at universities and a guarantee to winners in receipt;
- Possibility of participation in fundamental projects of students, and their payment for participation.

Discussion

The youth is the social accumulator of those transformations, and are done gradually (day after day and year after year); and therefore occur imperceptibly in depths of public life, escaping from the attention of the majority. However, these are critical views and moods concerning existing reality, new ideas and the energy which are very necessary during the time of radical reforms. As carrier of huge intellectual potential, special abilities of creativity (the increased sensuality, perception, figurativeness of thinking, etc.) by the youth is the introduction accelerator in the practice of new ideas, initiatives, and new forms of life. Hence as by the nature, it is an opponent of conservatism and stagnation. Thus, the youth age today is this concept of a bigger measure which is social and political than demographic. (Bourdieu P., 1994)

From these positions, the concept «youth» has to be considered as a multidimensional phenomenon, within a complete and integrated youth definition: «the youth is a special social and demographic group, limited by the age border (the bottom – 13-15 years, top – 29-30 years) with an unusual way lives, style of behavior, cultural norms and values, and are in a condition of transition from primary property to become an object of public influence and also from primary property to be the subject of social and reformative activity. System quality is a socialization process as a unity of social adaptation and individualization, which starting point is the movement on a certain vector orientation: self-knowledge – self-determination – self-affirmation – self-organization – self-realization» (Teslenko A., 2011).

Youth value in the modern world increases in connection with the expansion of the terms of education, vocational training, which is necessary as the conditions of scientific and technical revolution. Basically, youths easily acquires the main knowledge and skills. They are experimenter in different spheres of public life, including science.

Rapid growth of volume of information causes the need for careful bit-by-bit analysis and optimum selection. However, contradiction between a mass flow of new information and framework of teaching and educational process creates a problem of basic education and need for assimilation of some knowledge.

Does Kazakhstan University meet these requirements of school continuation, or systematic organization of scientific researches or culture translator? This system of university, which was created in Europe and continues to be supported by the European institutes, is obviously a combination of three specified types. The European universities provide themselves with the result of centuries-old development, and science and education ratio is balanced according to the purposes and values.

However, taking a look at Kazakhstan Universities, it is obvious the pure expansion of school is done in mass. Based on the system of higher education during the Soviet and Post-Soviet period, it was considered as a continuation school. Thus, the degrees and occupations of science were only the annex to the main profession which is connected together. It has led to the division (which is not known in some parts of the world) into science high school and academic. In such cases, a couple of science high schools got the role of the outsider, whereas the academic science performs the main models of scientific development.

The situation was aggravated in Kazakhstan after the signing of the Bologna agreement and the liquidations of the system of preparation of scientific staff in postgraduate study (candidate of science) and doctoral studies (doctor of science). Also, the transition of the ambassador high school education with the training of specialists on the basis of academic

degrees in master, PhD, and doctorate degree on a profile, finally "destroyed" high school science. Professional competences of the majority of young scientists in many spheres of science have ceased to set that level of scientific researches, which is demanded by science of a world class. In particular, level of works decreases, and also theses presented on protection, not to mention their scientific novelty (often they do not correspond even to the level of qualification of their work). And this situation occurs due to very poor quality textbooks, in which it is often possible to find not only mistakes, but also preposterous allegation (means in this case, humanitarian sphere, namely textbooks at courses of history, political science, sociology, cultural science and philosophy). In this situation, the young teacher not only has to fulfill huge number of hours in working in several higher education institutions; but actually, he/she turns into an ordinary teacher, sometimes even in qualification without surpassing the school colleague. About science, the speech does not go despite all plans of scientifically research work, or scientific activity represented by the performance of work which actually does not demand research as that.

In due time, the academician, T. I. Zaslavskaya said that it is not necessary to pay too much to scientist; otherwise, all places will be taken by careerists. The real scientist works for interest and the prestige which he earns should not correspond to essential remuneration completely. But now, the prestige is lost and payment level on one rate does not even provide for his/her basic needs. (Popova I.P., 2001)

Thus, the standards by which the high school science could be oriented have practically disappeared, and there is no more time to realize these standards by young (and not only) scientists working in higher education institutions.

The science is regarded as the "science" scientific community. And in these conditions, it is possible to call itself scientific community and even to speak about high school science, and to consider the modest budget that accustoms scientists of higher educational institutions. However, an objective view of this community – if to consider the real results of its activity from the point of view of world science – will show that they are very small. About serious reproduction of models of scientific activity, the speech of course would not be considered.

Young scientific publications of scientific magazines with a non-zero impact factor has reduced the «significance and importance» scientific work of scientists in Kazakhstan and has increased the number of links on their publications in rating magazines as a result of the regulations guiding publications «competition of purses». Therefore, the number of scientific intermediary organizations which guarantees the publication of scientific works for money has grown rapidly. The fact is that exclusive and serious

research which is being conducted is not a quality assurance of the scientific manuscript on the conducted research. However, this discrepancy makes the international quality standards of the scientific manuscript to reject such manuscripts for publication. The main reason is due to the fact that the scientific jargon «bad or poor usage of scientific jargon », which is a major key of the academic content where used wrongly.

Does Kazakhstan Universities effectively replace university in these conditions of academic science (and this way of development is supposed, as it is according to authors of reform which corresponds to the western sample)? It is thought that the negative answer to this question is obvious. The first reason is that higher education institutions are not ready on the base, and on the qualitative team of teachers to assume the development of fundamental science accompanied by applied researches. Secondly, because the traditions which have developed in the Soviet period in the functionality of science have absolutely contradict the understanding that there is a university. However, if the school continues, it cannot be a leader in the scientific sphere. The most interesting documents are those devoted to the modernization of education. This document talks only about education; and also, there are no other instructions in that higher education institutions are also the centers of scientific researches.

Today, the compensation of teachers of higher school is charged depending on the numbers of hours the teacher teaches their students. Even simple preparation for the occupations actually goes at the expense of an overload, without speaking about those teachers existing in the western higher education institutions system of regular liberation of the teacher from an academic load with salary preservation (so-called Sabbaticals). But then, it appears that the modernization of the higher education within Bologna Process actually does not reconstruct education on the western sample, but completely goes in line with the Soviet tradition which establishes that university is only a continuation school. But the situation is aggravated because without pursuing science, teachers cannot remain at the necessary level, and the accelerated falling of quality of education would be inevitable.

The hope of official's reformers for the emergence of «new scientific workforce» from low-skill young specialists with academic, instead of scientific degrees looks amateur. Therefore, they will be able to further and teach, and also actively being engaged in scientific activities. If reformers really think of positive reorganization (instead of modernizations, i.e. demolition of old system, and creation of new system), then the system of measures for the change of position of the teacher of higher education institution has to be provided. They are not only on a salary scale, but also in a professional development system i.e. the possibility of active professional communication at conferences, access to the modern information in

professional areas, not to mention the equipment, etc. In turn, these requirements even in case of their realization will be absolutely inefficient, if they are not accompanied with the reduction of the classroom workload and if there is no corresponding change in the structure of payment. Grants can play an important role, but owing to the fact that they are not a systematic character, they can be considered only as palliative and which also are not capable of changing their situation cardinally.

Sadly to observe, as the Kazakhstan science «grows old», the high level of prestige of the scientist falls because the senior generation of scientists cannot pass on the experience to young staff, and young scientists are not motivated to develop it. At the same time, the social status of the young scientist in many aspects is defined by the volume and quality of special knowledge, level of social competence as representative of a profession which is connected with intellectual work. Young scientists highly appreciate subjective personal potential. However, lack of necessary experience of participation in scientific and innovative projects, knowledge in the field of scientific management, commercialization of results of scientific work, lack of experience in the management and the organization of scientific groups for carrying out researches, has negatively influenced the process of personal realization and the development of skills of leadership. Indicators of the quality of life and vital success at youth age have become the result of material prosperity, career growth and the presence of interesting work. However, in structure of the motivation of a choice of scientific career, such factors such as interest in the scientific activity, creative nature of work, possibility of realization of intellectual potential i.e. motives, attracting youth in science and traditionally not connected with obtaining the income are prevailing. Research and academic activity is perceived by them as a self-development resource; hence for most part, it is the only opportunity for professional self-realization. It testifies to a randomness of such choice, his/her sensibleness and aspiration to be creative as well as his intellectual activity. Also, the stability of social and psychological model of the behavior of young scientists and preservation of the practician is noted.

On the other hand, the achievement of good results in the scientific activity of youth loses its value, as it does not give fast possibility of investment in the cultural capital of the material. The impossibility of an embodiment in reality of expectations which is connected with interesting work and opportunities of professional self-realization predetermines a dissatisfaction of the work of young scientists.

Key values of scientific activity holding young scientists from resignation from science will be coordinated with the factors which have affected their initial choice. For most of the young scientists, it is an

interesting, creative work, and an opportunity for realizing their own intellectual potential. Thus, the main reasons they are motivated to work in higher education institution is the satisfaction with the contents and nature of work, free schedule of work, opportunity to construct the interfaced professional career and the limited offers they are given on a regional labor market.

It is very necessary to specify that a reasonable part of young scientists on the objective indicators are treated as low-status and average status segments of the population. Therefore, their values concentrate in reproducing, which is simplified by the practician (achievement of material welfare, social comfort, family preservation etc.). Also, the institute of science is perceived by them as the social elevator for the increase in social and status positions.

However, majority of young scientists has continued to be guided on reproduction of the old practices of scientific and educational activity due to the lack of innovative environment and internal motives in the acquisition of new qualities. The scientific subject offers considerable influence in the formation of the social status of young scientists in Kazakhstan and in the whole world. So, within the state innovative policy, the technical and natural-science branches of knowledge have a priority in the development and financing process. In addition, the social and humanitarian knowledge in new conditions renders less demand. At the same time, essential contradictions and problems are outlined in the preparation of scientific staff of a socio-humanistic profile (an increase in the number of dissertation works, often result to a decrease in the level and quality of researches, publications is observed etc.). In this regard, the differentiated approach is necessary in the preparation and management of scientific and pedagogical staff depending on the branch of knowledge of young scientists, their motivational installations, specifics of research activity, and also the development of mechanisms of development of their research and academic career (stage-by-stage planning, stimulation of research activity, professional mobility, etc.).

On the other hand, the peculiarity of the category of "young scientists" (and the youth as a whole) as a social group is that it is constantly in a condition of transition from primary property to be an object of public influence, and from primary property to be the subject of social and reformative activity. Reaching the age of youth begins, when they starts possessing completely all sum and level of social communications; and the relations that is peculiar to this society means that it became the sovereign subject and object of social movement and by that denies themselves as youths. However, the characteristic features of the social status of young scientists are low level of the income, lack of opportunities for improvement

of living conditions, the low prestige of the profession, and insufficient resource base on their social and professional development limits the development and realization of vital plans. It causes the emergence of a phenomenon of status discrepancy, which consequence includes signs of a social and professional marginality (incompleteness of social recognition, uncertainty of the status in the society, weak identification with a profession and uncertainty of the future). In this regard, considerable social resources for the maintenance of the viability of young scientists and their professional development are required.

The joint order by the Minister of Health of the Republic of Kazakhstan in August 7, 2008 No. 439, Minister of Agriculture of the Republic of Kazakhstan, Minister of Education of the Republic of Kazakhstan, Minister of Industry and Trade of the Republic of Kazakhstan in August 5, 2008 No. 300, for the involvement of young scientists on solutions to the problems of the development of science and equipment for increase efficiently the solution to problems of young scientists; and attraction to their decision of the youth is offered to create Councils of young scientists in the scientific organizations and higher educational institutions of the Republic of Kazakhstan (Osipova O., 2011). Councils of the young scientific organizations and higher educational institutions are the main link of the system of councils of scientific youth. However, the council consists of young scientists of the scientific organization, and higher educational institutions who are participating based on the principle of voluntariness. Hence, it is public authority for the management of the scientific organization of a higher educational institution.

The main objectives of the Council include: assistance in the professional growth of scientific youth and their active participation in basic and applied researches; performance of the role of a representative authority and protection of the rights of scientific youth in an academic council, the organization management, and also in government authority and public organizations, in expressing the opinion of scientific youth on various aspects of professional activity and social living conditions; initiation of the creation of the youth scientific and innovative centers on a self-supporting basis and also other forms of the organization of research activity; association of efforts of young scientists for the solution of actual scientific problems and priority scientific tasks; the implementation of the research work of young scientists through system of specially developed actions; improvement of forms of participation of young scientists in research projects, scientific grants, competitions, programs, training; and the formation and expansion of a network of contacts with Councils of other scientific organizations and higher educational institutions. Certainly, the creation of Councils of young scientists is an important stage to the way of

realizing their social and professional status. However, the mechanisms of its realization are not worked out as always.

Firstly, the change in the conditions for preparation of scientific and pedagogical staff (orientation of programs of postgraduate education on practical training of researchers, academic and professional mobility, quality of researches), and also development of the state and non-state investment institutes for support of scientific youth are very important. Therefore, the increase in the requirements in the quality of preparation of scientific staff aims at changing the structure of the main educational programs (first of all, doctors): increase in the share of research component; decrease in the academic load of teachers, working with undergraduates and PhD students; differentiation of levels of communicative preparation on a foreign language; introduction of special courses on innovative management; creation of training programs for leadership; obligatory inclusion international components in educational programs, etc.

Secondly, within the development of modern society, its orientations in innovating the social status of young scientists is caused by new requirements, which is been shown to the scientific community. Hence, the results of sociological researches has been allowed to draw a conclusion about an insufficient level of development of competences for their participation in the innovative processes: leader and enterprise skills, the abilities of the organization and planning of scientifically research work, knowledge in the field of innovative management (principles of patenting, transfer, methods of commercialization of results of researches, development etc.), communicative skills, and the abilities to work in the international context (Osipova O., 2011). In this regard, it is necessary not only to support the innovative activity of young scientists, but also to change their values and practices of professional behavior.

References:

- Bourdieu, P. Beginnings. - M.: Socio-Logos, 1994.
- Korableva B. G. Institutional basis for the formation of professional communities. // Bulletin of SUSU. - 2006. - № 2 (57) - S. 123-129.
- Osipova O. Social status of young scientists in the region / Dis ... candidate of sociological sciences 22.00.04. - Saransk, 2011.
- Regulations on the Council of young scientists in research organizations and higher education institutions of the Republic of Kazakhstan //
- Popova I. P. Professional status of scientists - variations of behavior // Sotsis. - 2001. - № 12. - S. 64-71.
- Teslenko A. Youth socialization in Kazakhstan: Experience of social and cultural research. Lambert Academic Publishing, 2011.