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PROCESSES OF REFORMING TEACHER TRAINING IN MODERN RUSSIA (EXPERIENCE OF THE KAZAN FEDERAL UNIVERSITY)

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ABSTRACT

Two main approaches to reforming teacher training are discussed in today's educational system of Russia. One of them substantiates the need to update traditional for the Soviet time model of teacher training in colleges of education, while the other proves the possibility of a considerable improvement in quality of this process in conditions of classic universities, which in principle is not new for the Russian education system as well. Undoubtedly, various models have the right to be implemented. However, we should admit that comprehensive resolving issues in upgrading teacher training is now possible only in major university centers that have considerable educational, scientific, material and technical resources. With rare exceptions, these conditions are now inaccessible for most colleges of education in the country, most of which, due to the objective reasons, are in a difficult situation. This is one of the most considerable absurdities in modern education: A higher education establishment without necessary resources cannot train efficient teachers.

Keywords: Teacher Training, School of Sciences, Teacher Training Staff

1. INTRODUCTION

In Russia we consider several options to address the issue of reforming teacher training, one of which is consolidation of colleges of education in major federal universities that will make it possible to improve quality of teacher training on the basis of institutional, scientific, educational, material and technical resources. An example is the experience of the Kazan (Volga) Federal University that in September 2011 incorporated the Tatar State Humanitarian Pedagogical University (founded in 1876) and the Elabuga State Pedagogical University (teacher training started in 1898).

Traditions of teacher training in the Kazan Imperial University (founded in 1804) that was the ancestor of the Federal University has even more ancient origin. In 1812, a Pedagogical Institute was established within the university, thus initiating higher teacher training in the Volga region. After Moscow and Saint Petersburg, it became the third institution in Russia with a similar profile and significantly influenced educational and cultural development of country's East. The first director of the Pedagogical Institute was Franz-Xaver Bronner, professor of the Kazan University born in Bavarian town called Hochstadt in 1758. In formation of the Kazan Imperial University, many German scientists took part-Karl Friedrich Fuchs (physicist), Karl Ernst Claus (chemist), Christian Martin Joachim Frähn (orientalist) and others who are deeply respected in Kazan.

The history of this educational institution is full of both important achievements and names of famous graduates (outstanding scientists like N.I. Lobachevsky, I.M. Simonov and others), as well as lack of understanding the importance of teacher training in a classical university during a particular period in history (V.V. Astafiev) However, until reorganization in 1858 into pedagogical courses, the institute has trained hundreds of teachers of grammar schools and county schools for major part of the country, including the Volga region, Siberia, the Urals, the Caucasus and (Astafev, 1979).

1.1. Main

Currently, combination of possibilities of classical and pedagogical universities created a unique



environment for formation of a new teacher training organization structure (Shadrikov, 2012a). We shall outline only the most important advantages. First, the Federal University has concentrated most powerful scientific and educational potentialities in the Volga region in the field of pedagogy and psychology. Total number of teachers and scholars in the federal university from affiliated colleges of education only is over 1,200 people, of which 10% are Doctors and 63% are Candidates of Sciences. Availability of such considerable scientific and educational resources not only makes it possible to resolve educational issues of any complexity level, but also to make breakthrough in scientific research, particularly of applied nature, which is now the most requested by educational practice (Shadrikov, 2012b).

Second, participation of leading scientists from specialized (in physics, chemistry, history) institutes in teacher training has significantly improved focused training of graduates (Card and Krueger, 1996). It should be stressed that each field-specific Institute of the KFU (e.g., Institute of Physics, Institute of Ecology and Geography,) is the focal point of working with teachers in the subject field, thus making it possible to reach a higher level of teachers subject competence. We assume that a qualified teacher, along with methods of teaching, should obtain fundamental knowledge in his field. In order to ensure this, the latest teaching and laboratory facilities are used in institutes, involving leading scientists and specialists.

Third, the KFU delivers teacher education at all major levels (Non-University Level Higher Education programs, pedagogical undergraduate training, masters program, teachers professional training and retraining, additional professional education and postgraduate education through traineeship and doctorate) and trains teachers in all subject areas available in secondary school. Availability of a wide range of professions and specialities in the environment of a large university created conditions for most complete implementation of the principles of systemacity, scientific character and continuity, which, in turn, meets contemporary requirements and possible approaches to work conditions and needs of the region and the country.

Fourth, incorporation into the structure of the Federal University of the Volga Interregional Center for professional training and retraining of teachers made it possible to create an effective system of continuous pedagogical education and teacher support during all the period of his study.

Especially important is the fact that the KFU has taken the responsibility for professional development of

teachers, creating its own system of teachers certification, implementing flexible forms of improving their skills and training based on immediate needs of educational establishments (Shadrikov *et al.*, 2012). This makes it possible to establish an effective tie between pedagogical science and teaching practice, as well as to make timely adjustments to the process of primary teacher training. It is also symptomatic that the trend of improving teachers' qualification in country's largest universities should now gain momentum as an essential condition for improving quality of school education.

In general, establishing the KFU provided a unique opportunity to fundamentally reform vocational teacher training by changing its organizational mechanisms, content of the educational process, but in the environment of a Federal University, rather than a college of education that has:

- Fundamental schools of sciences
- More qualified academic teaching staff (compared to affiliated pedagogical colleges)
- Specialized institutes that provide high level of specialized teacher training in all subject areas
- Modern specialized training and research laboratories

The Kazan Federal University has the ability to implement the latest scientific and methodological pilot projects in its own two secondary schools for gifted children within its structure. Fusion of powerful scientific and educational potentialities represented by leading Russian and foreign scientists in various areas of expertise within a single university can considerably increase effectiveness of the educational process in University's basic schools and after that to translate best methods into the education system in schools.

An important condition for effective training of school teachers is also updating the content of teacher training in the university. If in the twentieth century education based on the "education for lifetime" principle, today we speak of establishing education as person's lifestyle in accordance with his individual and personal features and requirements of the modern Russian society to quality of human capital. World experience shows that during his/her lifetime, a person acquires up to 10 competencies. This means that not only teachers but our students, i.e., our future teachers as well, should, above all, "learn to learn". In this regard, it becomes relevant to train not just a teacher, but a tutor to be a guide for children in the world of knowledge. The need for these changes is stipulated by a whole set of trends in social



development, main ones being: Decreasing the period of information doubling, integration of science and production, individualization of education on the background of its globalization (Andreev, 2008).

It required major changes in the content and technology of school teacher training, like:

- Forming universal teacher competencies that combine not only high level of subject training, but sufficient general literacy, well-developed communication skills, ability for person-to-person communication
- Targeted" teacher training that meets the needs of different types of schools-ungraded, with in-depth study of specific subjects, specialized high schools, high schools, colleges, intended for forming teacher's ability to provide individual trajectories of student education
- Introducing the latest educational theories and methods into the process of training the will-be teachers of future teachers and thus, active development of these educational innovations in institutes
- Updating psychological and pedagogical teacher training in order to organize effective extracurricular education and self-development, which is especially important in the context of deteriorating contemporary social, political, environmental, demographic, economic, ethical and ethnic problems in the country

Naturally, it entailed a lot of practical work in the Kazan Federal University in the area of: Improving standards and programs (curricula, educational pedagogical practices, management of educational process, evaluation of training quality), developing new professional standards of educational work, defining topical issues of actual and highly sought by the education system research in the field of pedagogy, strengthening practical orientation of teacher training, upgrading postgraduate teacher training, updating information background of teacher training, improving employment system and career development of young teachers. Analysis was made of scientific and methodological potentiality of university departments related to teacher training with the goal of creating real research interaction between teaching scientists and most importantly, structuring research in education through formation of a coordinated university-wide perspective.

Worldwide experience confirms that quality of education largely depends on the level of trained students' knowledge. It is not a secret that in the ranking of enrollment to Russian higher educational establishments that is annually published by the "Higher School of Economics" National Research University, colleges of educations lag behind. This fact is largely caused by low attractiveness of university and further careers. However, one should note a marked increase in the average score of the Uniform State Exam with the students enrolled to pedagogical departments of the KFU by the results of admittance campaign in 2012. This is also caused by the policy of regional authorities aimed at improving social status of teachers. In turn, attracting more trained school leavers can improve the quality of training of the will-be teachers.

Professor-and-pedagogical resources incomparable with those of most Universities, make it possible to involve most qualified specialists into teacher training and retraining at the KFU. It should be noted that at present the university has more than 50 full-time doctors of pedagogical and psychological sciences. Much attention is paid to internal assessment of professors engaged in teacher training. There was launched the implementation of own modular professional development program with respected Russian and foreign scientists and practitioners invited. In 2012 alone, teachers of pedagogical departments received over ten lectures on actual issues in pedagogy and psychology delivered by professors K. Waschik (Germany), P. Tolchinsky (Austria), M. Choshanov (USA), V. Gyurovoy (Bulgaria), S. Podgoretsky (Poland), M. Zhigalova (Belarus) and others. Educare, Singapore's leading education company performed international certification of 120 KFU professors. Within three years it is planned to complete practical training and certification of all professors in pedagogical departments. Also important is higher average salary for professors in the Federal University compared to colleges of education.

The strategy of reforming the system of teacher training and retraining at the Kazan Federal University is defined by the Coordination Council for Teacher Education of the Republic of Tatarstan that has united not only scientists and teachers of numerous departments of the university, but the entire educational community of the republic, including representatives of regional Ministry of Education and Science, other universities, heads of intermediate vocational education establishments and mainstream schools, talented nongraduate teachers. It is important that the Coordinating Council is headed by the Minister of Education and Science of the Republic of Tatarstan and the Rector of the KFU.

It is particularly important that the issues of teacher training are discussed at meetings of the Board of



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Guardians of the Kazan Federal University that includes CEOs, politicians, scientists, public characters and is chaired by R.N. Minnikhanov, the President of the Republic of Tatarstan.

Close cooperation with regional power structures actually gives employers a real opportunity to influence the process of teacher training at the Federal University: By making changes in the variative part of educational programs, introducing new forms of pedagogical practices, supplementary training in most popular areas of training that experience shortage of teachers in the country. Coordinating Council is one of country's first attempt of coordinated action of regional authorities and a federal educational institution in the field of higher education.

2. CONCLUSION

At present, the Kazan Federal University, by the initiative of regional authorities, is establishing a comprehensive program of reforming general education system in the Republic of Tatarstan. Its main priorities are:

- Creating a unified multi-level system of education
- Selecting pupils (from the senior secondary education stage) that are prone to teaching and their in-depth training in specialized classes
- Professional training of a new generation of teachers and pedagogues according to undergraduate and graduate programs
- Implementation of effective advanced training and re-training programs for teachers
- Development of project activities in the field of
- General secondary education (working with gifted children, children with abnormalities, development of e-learning
- Secondary and higher vocational education (various forms of professional communication, creating electronic databases, implementation of human resources support programs in education
- Advanced training and retraining for teachers (implementation of innovative approaches and developing new methods of training, developing electronic interaction systems

Development and implementation of educational and psycho-pedagogical support system for individual educational activities of pupils and students:

• Programs for working with pupils and students with regard to their intellectual gifts

- Education profiling programs at the senior stage of general secondary education
- Programs for pupils professional orientation with regard to human needs in the region and the Russian Federation, as well as educational abilities of the Kazan (Volga Region) Federal University

Thus, in the changing system of teacher education in Russia, the Kazan (Volga Region) Federal University implements its own model of teacher training based on improvement of scientific and innovation activities in the field of teacher training, improves social significance and relevance of results of basic and applied research in actual issues in pedagogy and psychology, develops and implements highly effective education systems, including advanced education methods for high and secondary school. This is one of components of its mission to be the leading scientific and educational center in the Volga Federal District of the Russian Federation.

3. REFERENCES

- Astafev, V.V., 1979. Essays on the History of Kazan University. Kazan University Press, Kazan, ISBN-10: 5-7464-0693-7, pp: 304.
- Andreev, V.I., 2008. Pedagogy of higher education. Innovation and Prognostic Course. Kazan, Moscow International Institute of Econometrics, Informatics, Finance and Law, pp: 500.
- Card, D. and A.B. Krueger, 1996. School Quality and the Return to Education. In: Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success, Burtless, G. (Ed.), Brookings Institution, Washington, DC, pp: 387-387.
- Shadrikov, V.D., 2012a. Quality of Teacher Training. 1st Edn., Moscow, Logos, pp: 199.
- Shadrikov, V.D., 2012b. Students' Development in the Learning Process. In: Psychology in Russia, State of the Art. Scientific Yearbook, Zinchenko, Yu, P. and V.F. Petrenko, (Eds.)., Moscow: Lomonosov Moscow State University, Russian Psychological Society, pp: 388-404.
- Shadrikov, V.D., L.N. Glebova and M.D. Kuznetsova, 2012. Monitoring Quality of Higher Pedagogical Education. 1st Edn., Moscow, Logos, pp: 368.

