

Major factors of teachers' resistance to innovations

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Abstract

Modernization and improvement of the quality of general secondary education can be attained while enhancing teachers' innovative activity. Therefore, it is important to identify and substantiate the factors and reasons for secondary school teachers' innovative "passivity", which is the purpose of this work. The study contributes to eliminate these factors during the course of training teachers, preparing students to obtain a degree in education for innovative activities, and improving practicing teachers' effectiveness. A distinctive feature of the study is the fact that it applies a broad approach that allows identifying social, psychological and professional factors, including relevant interrelated groups of both objective and subjective reasons that predetermine the teachers' resistance to innovations. The empirical research revealed a decline in the social and psychological factors' negative effects in the recent years and a substantial moderating influence of the professional factor on teachers' innovative activities.

Keywords: Professional activity. Innovative passivity. Resistance to innovations. Innovative activity. Teachers. Factors. Causes. General secondary education.

1 Introduction

The identification and elimination of factors that predetermine the teachers' innovative passivity will help to overcome their negative social and pedagogical effect, release teachers' innovative energy and use it as an additional resource for the continuous modernization of an education system by their consolidated efforts.

The transition to the information society and its prospective transformation to the knowledge society set increasingly high standards for human capital. In

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Recebido em: 02 jun. 2018

Aceito em: 30 jan. 2019

order to build it, one lay particular emphasis on so-called new cultural practices that include an innovative type of pedagogical activity. It contributes primarily to the dynamic improvement of the secondary education quality representing the foundation of any education system. Thus, the role of a school teacher is changing.

Nedzinskaitė and Barkauskaitė (2017) share this opinion and believe that changes in all spheres of life depend on the school and the teacher and require a set of new and broader teachers' competences. Based on their research, they concluded that teachers should develop their innovativeness and be ready to solve professional problems in an innovative way. In our opinion, it is because the school years are a most sensitive time for the formation of many personal qualities and the development of students as future citizens, initiative organizers and competent employees. In the new and sometimes unexpected professional conditions, the teacher should actively search for the ways and means to improve his/her work on educating an effective person for a rapidly developing society. Thus, every effective professional activity of a teacher should be considered as a contribution to building the country's educational potential, which explains the special relevance of the research goal – the identification and substantiation of the main factors and reasons for the innovative passivity of secondary school teachers.

2 Literature Review

Russia has created certain conditions for the development of teachers' innovative activities. First of all, it should be noted that scientists have worked out the theoretical foundations for pedagogical innovation, the teaching aimed at creating pedagogical innovations, their evaluation, use and practical implementation (Khutorskoy, 2008). For example, Lazarev (2008) considered the problems of school development practice; the quality of school innovation activity and its evaluation; the problems relating to motivation of the teacher's innovative activity, etc.

Slastenin and Podymova (1997) developed a theoretical background, content and structure of the teacher's innovative activity; leading trends, principles and conditions of the teacher's innovative activity formation; revealed psychological barriers hindering this type of the teacher's professional activity.

Potashnik and Lazarev (1995) made a considerable contribution to the definition of the basic concepts of pedagogical innovation. They developed the structure of the innovation process; the life cycle of pedagogical innovation; exarticulated the types of pedagogical innovations, criteria and levels of pedagogical innovation

and the sources of the school development ideas, and the parameters of innovative ideas evaluation, etc.

Khutorskoy (2008) contributed to the development of the theoretical foundations for pedagogical innovation. He considered the essence and structure of the innovative educational process and the innovative activity at school, etc.

An innovative movement of teachers has been formed and is developing in Russia. Innovative centers of advanced training for teachers beginning their career are being opened. Teachers introducing innovations into the educational process and pedagogical collectives developing and implementing innovative programs are given state financial support within the national educational project "Education". A system of moral and material stimulation of high achievements of both teachers and schoolchildren is being developed; innovation centers are being set to enhance the effectiveness of research and innovation activities of educational institutions and teachers, and various students' and teachers' competitions are regularly held. Despite this, currently, students' parents, students themselves, the public, scientists, and the country's leaders express dissatisfaction with the quality of general secondary education, which in our opinion is predetermined by the teachers' passive resistance to innovation.

The teacher's innovative passivity can be considered as a professional behaviour characterized by the following features:

- the insufficiency of intellectual efforts in finding ways to improve educational activity efficiency;
- the predominance of the desire to use the products of someone else's innovation over developing their own abilities and creating original educational products;
- the lack of initiative;
- the alienated activity that does not allow realizing oneself an active subject and the owner of one's own innovative products.

The innovation resistant teacher's personality is characterized by such negative moral qualities as irresponsibility, indifference to the fate of the country and of the younger generation. The study shows that innovation resistant teachers can be engaged in innovation only if the latter is imposed on them by the school administration.

Russia has developed and approved the 2016-2020 Federal Target Education Development Strategy (RUSSIA, 2014). Its goal is to provide the environment for an efficient development of the Russian education aimed to form a competitive human capacity. This goal presupposes the solution of the following tasks of the Strategy, among other issues: to develop the advanced tools, content, new technologies, and forms of classroom management in general secondary education; to make children and youth aware of the academic and creative activities to find talented youth; to develop relevant assessment criteria for education and academic achievements. Besides, a network of schools is planned to be established for implementing experimental and innovative programs which could try new technologies and education content, and to be nurtured by a competitive support of school initiatives and network projects. These tasks require one to identify, to create, and to spread the best practices in classroom management in general education, which underlines the need to overcome innovative apathy of the teachers and to support teachers-innovators. This is important to increase the competitiveness of the Russian education.

In Europe, there is an opinion that it is necessary to train teachers as leaders and role models in the society, transmitting the new living conditions in the 21st century (Owen, 2015). As noted by Bush et al. (2016), the teacher's leadership can become transparent providing that the teachers' roles are legitimized. Special schemes or programmes that recognize the teachers' experience and contribute to the teachers' excellence can help to provide teacher's leadership, establishing teacher's professional learning communities, thus improving school life.

Much is done in Malaysia to improve the quality of the teacher's activity. The expert teachers' scheme, first introduced in this country in 1994, is now known as the "Excellent teachers' scheme", and is one of the career paths offered to school teachers. In that country, having excellent or perfect teachers at school is considered as an advantage, as they are valuable assets for the school that provide expert guidance for other teachers, track the latest teaching practices and create innovative approaches and learning materials for learning improvement. Therefore, it is necessary to actively encourage all teachers to participate in research and innovation projects under the guidance of excellent teachers who are both researchers and innovators, to gain experience and benefits from research that can improve teaching and learning (BUSH et al., 2016).

Both domestic and foreign experience proves that the teachers' innovative activity is accompanied by an increase in the quality of their work. For example, in Indonesia, the innovative professional development worked out and implemented

by mathematics teachers has led to improvements in the teacher's concept of teaching mathematics, practical training, knowledge of mathematics and the use of teaching aids (ROMER, 2008).

The results of the study of Berrocoso, Sánchez and Domínguez (2013) indicate an increase in the teachers' interest in innovation during the process and the emergence of their sense of "subjective well-being". Chemi, Davy and Lund (2017) emphasize the crucial importance of the teachers' emotions when developing innovative learning and education processes. Therefore, it is possible to say that overcoming the teachers' resistance to innovations will contribute to improving the education quality and the teacher's sense of personal well-being.

3 Methods

To achieve the goal of the study a method of theoretical research for analysis was applied. This method does not directly affect the factors under study. It promotes the study of their essence, identification of facts in accordance with the goal, contradictions and laws, and exarticulation of interrelated groups of causes that determine the teachers' resistance to innovations.

In addition to the theoretical analysis, methods of empirical research (a survey, retrospective analysis of personal experience) were used, the main one being the method of questionnaire survey. Its purpose is to identify the secondary school teachers' attitude to innovation. The survey was anonymous and involved 562 teachers of general secondary schools of the Republic of Tatarstan and some secondary schools of the Republics of Bashkortostan, Udmurtia, Perm Region, and Kirov Region of Russia. These schools were chosen due to their territory closeness and because they represented an opportunity for a large-scale study providing credibility for the data obtained. It should be noted that the schools were questioned in cities and towns with a population of 20 – 80 inhabitants. There are a lot of these cities in Russia, and general secondary schools there are more or less the same. The teachers from these schools have nearly similar professional background. The teachers from the general secondary schools were questioned; heads of the schools were not included in the survey.

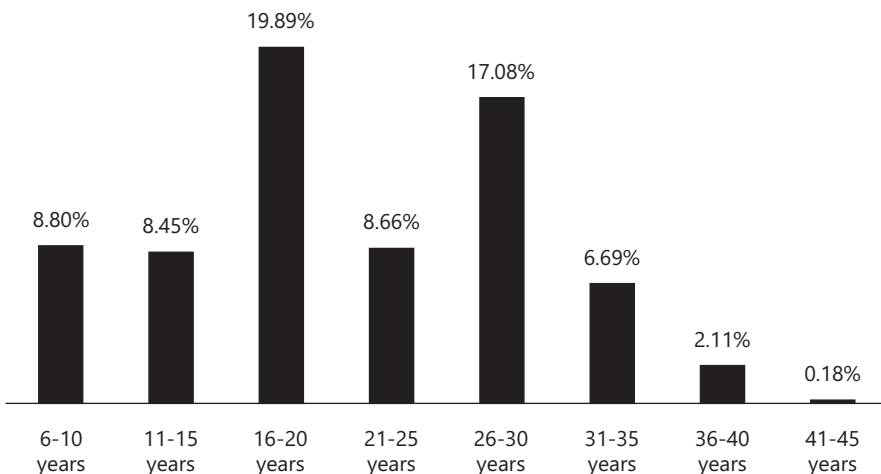
The questionnaire included 26 closed questions, giving an opportunity to either select an opinion appropriate to the respondent out of the suggested responses, or evaluate any of the specified parameters. Besides, the questionnaire included questions on the content and control questions, as well as ranking questions. The questions on the content as the main ones were aimed at gathering information.

These include, for example, the question “What indicators of the evaluation criteria for innovative activities, in your opinion, reflect to the greatest extent your willingness to implement them (underline the chosen indicators)?”

Control questions are designed to estimate the objectivity of the answers, for example, “How do you feel about the teacher’s participation in the creation of educational innovations?” An illustration of ranking questions can be a question that contains a request to build a certain sequence of the proposed answers according to the degree of their significance for the respondent. For example, “What motivates you to create educational innovations? Arrange the answers in the order of importance for you (rearrange their order).”

The survey involved the use of stratified sampling (participants to the survey were a statistically homogeneous group: as teachers of secondary schools; heads of schools did not participate in the survey), and random sampling. The number of teachers participating in the sample survey was 562, the total number of respondents – 1390 people, which ensures the representativeness of the empirical material.

One should note the teachers’ work experience. Based on their work experience at school, the interviewed teachers can be distributed into several groups (Figure 1).



Source: own elaboration (2018).

Figure 1. Teachers’ Work Experience

The respondents were divided into 3 groups by their work experience: 1) young teachers working for 5-10 years (21.3%); 2) teachers with 11-20 year experience (28.34%); 3) teachers with huge experience (44.72%). The subjects that did not state their work experience turned out to be 5.64%. Thus, it could be seen that the biggest group includes the employed teachers with 21-45 year experience at the age of 43-67. Their average age is 55 and older. It means that being about to retire or being already retired, they form the most inactive group of teachers regarding the attitude to innovative activities.

What is more, we paid attention to the qualification categories of the teachers involved into the survey. The study attracted 54 teachers with up to 2-year experience (9.61%). They have not yet been certified for the 1st qualification category and are the least reliable stratum of teachers at school because their professional identity is still developing, and in case of arising problems with adaptation to the teacher's activities in general secondary school they could easily change their work.

The teachers with the 1st qualification category comprise the largest group (80.6%); 9.79% of respondents make part of the high qualification category.

The questionnaire data are supplemented by the results of the retrospective analysis of rather a long (14 years) experience in managing secondary school teachers' research and innovation work. The analysis, as well as the numerous use of the method of conversation with teachers, had previously revealed that about 20% of the secondary school teachers are predisposed to innovative activity, the teaching staff accounting for 89 teachers, that is, one in five teachers.

4 Results

The questionnaire data processing demonstrated that only 20.95% of the respondents are engaged in the development of educational innovations, while 73.42% of them borrow ready-made educational innovations, which allows considering them as teachers resistant to innovations and could result in their resistance to innovations. Every teacher in their professional practice borrows or copies some educational products. But if they freeze at this level, their creative capacity is low, and their inert attitude contributes into its loss. These teachers can hardly be efficient for updating the educational process in a school and the education system on the whole and, thus, in improving the quality of the country's human capital. In our opinion, 5.63% of the respondents who did not answer the question can also be viewed as innovation resistant, which in total will amount to 79.05% of the surveyed teachers. These data coincide with the results of the

retrospective analysis of the experience in management of the teachers' research and innovation activities and conversations with them (see: above) and indicate that innovation has not yet become Russian teachers' mental priority.

At the same time, 36.09% of the responding teachers are satisfied with the state of modern educational process at school, 8.1% are not satisfied, 54.58% of the teachers are not quite satisfied, and 1.23% of the teachers do not think about it. In general, it can be concluded that 62.68% are dissatisfied with their professional activities. This, on the one hand, determines their resistance to innovation, reducing educational innovation quality; it provokes the emergence of a "burnout" syndrome, and sometimes makes the teachers leave the profession. On the other hand, this sufficiently broad category of teachers can be involved in active innovative activities, which will help to overcome the dissatisfaction that they experience when teaching. This is confirmed by the data that the majority (74.65%) of the respondents view innovation as a way of teacher's creative self-development and self-realization, which means that their attitude towards innovation is generally positive. The gained contradictory data encourage identifying and explaining the factors that predetermine teachers' resistance to innovation.

These factors are considered as the acting forces or essential circumstances determining the nature and individual features of some process or phenomenon. They include objective and subjective reasons, which are the basis or pretext for certain actions in a certain process determining its consequences. The main factors that predetermine the teachers' resistance to innovations can be classified as social, professional and psychological.

The **social factor** includes a group of interrelated, both objective and subjective reasons. The first one is the consequence of rather a long-term experience of poor social conditions associated with the worst socio-economic crisis affecting Russia and the education system in the late 20th – early 21st centuries. The crisis led to the emergence of social and professional pessimism shared by most Russian teachers that damaged the teachers' professional determination and deteriorated their competence. This latter circumstance led to the emergence of another social cause manifested in the growing outright disrespect for this profession and its representatives in the society in crisis. It gave rise to the consequent cause, namely, a sharp decrease in the number of those wishing to receive pedagogical education and work at school.

Universities training specialists in the direction of "Pedagogical education" commenced enrolling secondary school and teacher training college graduates

with average academic performance. Therefore, competition in the system of general secondary education, as a social circumstance motivating to effective professional activity, arose much later than in other walks of life of the Russian society. It should be noted that some teachers do not admit the phenomenon of educational competitiveness, which can be regarded as a subjective reason for the teachers' resistance to innovation. The question whether there is any competitiveness at school where the teacher works is quite often answered like "No, we have no competition. We work together." Considering the incentives that could have improved their innovation activities, the respondent teachers ranked "enhancing competition" as the 5th out of 8 possible. Thus it can be stated that lack of morally sound competition does not allow solving human resource policy problems, activating the teachers' innovative activity in due time.

Coming out of the socio-economic crisis of the late 20th century, Russia is rather mildly experiencing the 2008 global financial crisis, and the sanctions imposed by the United States and the European Union. The economic growth, the changing socio-economic situation, and the increasing role of education in the development of the country – all these factors have changed the attitude to the teacher in Russia. At present, a new salary system has been introduced, including incentive payments, and for the first time in many years the teacher receives a decent salary corresponding to the average one in the country economy. Nevertheless, ranking the reasons that hinder the teachers' active participation in innovation activities, many participants in the survey put "lack of time and shortcomings in self-organization" in the first place, which can be explained by the heavy academic load, which teachers strive after in order to get larger salaries. The 4th rank is given to the insufficient financial incentives, which also indicates a continuing dissatisfaction with the current salaries. Apparently, the term was too short for the internal motives, which most effectively encourage teachers to innovate and facilitate their transition from being innovation resistant to active implementation of professional activity, to displace the external motives associated with an increase in the income at the expense of their professional activity quality.

The **psychological factor** includes, in our opinion, two groups of predominantly subjective reasons: the first one unites reasons related to professional activity, the second – those ones that are related to the teacher's individual and personal characteristics.

Considering the first group of psychological causes allows stating that the teachers' traditional conservatism, their stereotypical thinking, as well as

psychological barriers hinder the teachers' innovative activity and serve as factors thwarting the acceleration of teachers' transition from being innovation resistant to an active position in the implementation of innovative activities. Slastenin and Podymova (1997) summarize the reasons for the emergence of psychological barriers that not only decrease the teachers' innovative activity but even cause them to resist it. The reasons include neglect of the need to explain to teachers the purpose of the change; fear of the unknown; exclusion of teachers from the process of developing and planning the introduction of innovation; habitual style of work; biased attitude to innovations; increase in the amount of work, etc. Taken jointly, they exerted a really powerful influence on the teachers' attitudes towards innovation and its nature at the end of the 20th –beginning of the 21st century. Thus, many attempts of the state to modernize the system of general secondary education (introduction of state standards, unified state examination, classroom e-diaries, etc.) were not supported by teachers, which extended the term and reduced the quality of development and implementation of innovations.

The average age of the teacher in Russia is 55. Nowadays the number of secondary school teachers with work experience from 6 to 15 years is small. In addition, it should be borne in mind that not all teachers of this group work at school willingly, on their vocation. Some of them supposed working as teachers just for a while (because they could not find a job in other places), but stayed at school forever. Not having been oriented in their student years to work at school, they did not prove to be either theoretically or psychologically, or methodically ready for innovative work with children. For some of them, to depart from traditional teaching and commence to apply new cultural practices (research, heuristic, project, interactive training, etc.) is still problematic. Thus, among the reasons for innovation resistance, the respondent teachers gave the 1st place to the time shortages and improper self-management; the 2nd on the list is the lack of theoretical knowledge; the lack of advice they need is on the 3rd place, the 4th place goes to inappropriate financial incentives; the lack of confidence in their abilities is on the 5th place, and the lack of support of their colleagues is on the 6th place. Therefore, we cannot rely on the statement that youth is an agent of new innovative knowledge, and that it brings them into their business areas (WEBB; KUNTUOVA KARABAYEVA 2018). Indeed, youth could be highly sensitive to innovations, they owe significant capabilities due to the age, but if these capabilities are implemented in education to their full, then, unfortunately, this is done by a handful of young teachers.

Currently, there is a tendency to a significant decrease in the influence of psychological reasons that impede the teachers' innovative activity. The research

revealed that innovative activity has become one of the values for the work at school for 22.54% of teachers; 47% of respondents believe that innovative activity is a way for teachers to achieve pedagogical skills. Nevertheless only 14.96% of respondents are satisfied with the expanding opportunities for self-actualization and realization of innovative potential. None of the interviewed teachers indicated that they experienced positive emotions and derived pleasure from the results of their innovations.

3.87% of respondents do not support innovative activity; 24.12% of teachers are irritated with a large number of competitions and various conferences, in which they are invited to participate. This rather low percent of teachers with a negative attitude to innovation does not inspire much optimism, as many scientists and teachers note that the modern Russian teacher is focused mainly not on the creation of a new educational product, but on the “consumption” of ready-made innovations, which is confirmed by the research results.

The teachers' individual and personal characteristics (the second group of subjective psychological reasons) also affect their enthusiasm/ resistance to innovation activity. It would be wrong to state that if a teacher receives special professional training, he will be innovation-oriented. The conversations which have been carried out for the last 10 years with university undergraduate students (about 1000 students) trained in “Pedagogical education”, studying educational disciplines containing information on pedagogical innovation and teachers' innovative activity in the field of education and training, and also studying an educational discipline as “Innovative management in education”, testify their interest, but some of the interviewed students are not convinced of the necessity of being engaged in the professional innovative activity. This can be partly explained by the fact that many of them have parents working as teachers who are not engaged in innovation activities, that is, they set an example that this is not necessary. Therefore, it is essential to focus on the formation of future teachers' motivation for innovation.

There are academically successful students concerned about the problem of preserving the “zone of personal comfort”, which, in their opinion, cannot be combined with active innovation. Undergraduate students' life plans include employment (not always in the education system), settling personal life, giving birth to children, obtaining a second higher education, etc. Not all graduates of pedagogical specialties plan to build careers in the sphere of education, actively participating in innovation activities. They do not identify themselves as innovators in their life and professional strategies.

Professional factor. One of the subjective reasons of professional nature is that most of the school teachers for a long time (during the 1990s and the 2000s) manifested a tendency to reproductive rather than creative teaching activities gaining a relevant practical experience. Teachers were unwilling to update their theoretical knowledge that would contribute to the improvement of practice and, as a result, ceased to be engaged in self-education. Such an opinion appears to be true owing to the retrospective analysis of a fourteen-year experience in supervising teachers' research at Mendeleyevsk Secondary School No.1 in the Republic of Tatarstan.

It is necessary to take into account the well-known fact that the moral deterioration of the knowledge gained during the years of study does not increase the teachers' susceptibility to innovation and their activity in this direction. It is apparent that knowledge is the source for the emergence of new ideas on which all innovative activities are based. Moreover, it should be noted that under the influence of the progressive increase in the requirements to the nature and quality of professional activities and positive changes in the teachers' social conditions, their attitude to the renewal of professional knowledge changes, which currently reduces the negative impact of these reasons on the teachers' innovative activities, though does not eliminate them.

The next significant objective reason determining the nature of the teachers' attitude (85.92% of respondents have higher education) to innovation and their enthusiasm or resistance is their professional readiness for this type of activity. According to the results of the questionnaire survey, only 38.20% of the respondents gained the knowledge and skills necessary for innovation activities when studying at the University.

When turning to the Federal State Educational Standards regulating training of teachers (most of whom are bachelors) it becomes clear that according to the Federal State Educational Standard 3+ of Higher Education (RUSSIA, 2018) the graduate (qualification "Bachelor") must have such a competence as readiness for professional activity in accordance with legal documents in the field of education. These documents in the sphere of teacher's innovative activities include, for example, the order of the Ministry of Education and Science of the Russian Federation of 23 July 2013 "On approval of the procedure of formation and functioning of innovation infrastructure in the education system" (RUSSIA, 2013).

The draft Federal State Educational Standard of Higher Education (3++) in the direction of training 44.03.05 "Pedagogical education" (qualification "Bachelor"),

approved of on 22.02.2018, states that “when developing a bachelor’s program, the organization independently (taking into account the recommendations of the approximate basic educational program) establishes the orientation of the bachelor’s program to: the region (regions) and (or) the sphere (spheres) of the graduates’ professional activity, the type (types) of tasks and tasks of graduates’ professional activity; if necessary – on the subjects of graduates’ professional activity or area (areas) of knowledge” (RUSSIA, 2018). It should be noted that the wording of the universal and general professional competences, which a graduate who has mastered the bachelor’s program must have, are so general (for example, system-based and analytical thinking and development and implementation of the projects), that any meaning and any content can be implied by them; they will depend on the professional positions, preferences and competence of the programme developers, not on the state directive to prepare teacher education students for innovation. Thus, not all higher education institutions, referring to the fact that the level of bachelor degree does not envisage teacher training for innovation, would take the commitment of extra obligations. At the same time it should be noted that the bachelor’s program lacks specialized subjects, but trains the students for the innovative activity by introducing scattered information about theoretical grounds of the teachers’ innovative activities, teachers’ experience in innovative activities by demonstrating innovative forms, methods, techniques, as well as innovative technologies of professional and pedagogical performance. But this depends on personal professional preferences of the teachers training teachers. It should be added that the master’s program includes subjects as Innovative Processes in Education. Total value of this subject is 2 credits.

At the same time, on the basis of the same Order of the Ministry of Education and Science of the Russian Federation and the Letters of the Ministry of Education and Science of the Republic of Tatarstan No. 3687/15 of 12.03.2015 “On the recruiting of pedagogical staff with the highest qualification category in organization of innovation” (TATARSTAN, 2015a) and the Order of the Ministry of Education and Science of the Republic of Tatarstan of 15.07.2015 No. 7880/15 “On approval of the Regulations on the Expert Council under the Ministry for innovative work in the education system” (TATARSTAN, 2015b), the municipal curators of educational institutions have been instructed in their verification process of the teachers’ applications for the highest qualification category, to pay attention to their involvement in the work of regional innovation platforms that have been approved of by the Expert Council on innovation, the work in this direction being already underway. Thus, on the one hand, the teachers’ actual professional unpreparedness becomes an obstacle to the active implementation of effective innovation practices that could contribute to the transformation and improvement of the quality of the educational process in school, and to their careers growth.

It is noteworthy that effective pedagogical activity is characterized at present by increased knowledge intensity, which teachers and school principals may not be aware of. The use of ready-made or development of new training technologies in education, creation of new systems and programmes of teaching and education is impossible without the synthesis of scientific knowledge about the student, modern approaches to training and education, pedagogical technologies, etc. Moreover, the teachers' innovative activity is closely related to research that is also characterized by knowledge intensity.

During the survey, the teachers were asked to arrange a list of the reasons that are barriers for them in the process of developing their educational innovations according to the order of their importance. The respondents ranked them as follows: 1) lack of time and problems in self-organization; 2) insufficiency of theoretical knowledge about educational innovation and the process of their development; 3) lack of advice; 4) insufficient financial incentives; 5) lack of support from colleagues; 6) lack of confidence; 7) lack of confidence in the relevance of innovation for teachers; etc. Thus, the lack of special professional training for innovative activities is rather a serious objective reason for modern teachers' resistance to innovation, causing the emergence of psychological barriers, reducing their innovative potential and the quality of professional activities, which is important for the quality and relevance of education at all levels, as well as for the high status of the teaching profession itself (OWEN, 2015).

5 Discussion

Our extensive extended interaction with school teachers during seminars, round tables, lectures, and other forms, our work with the teachers from 1993 Mendelejevsk Secondary School No.1 in the Republic of Tatarstan, and the analysis of the literature made us conclude that a restrained position in relation to innovations has prevailed in the teachers' opinions in Russia since the 1990s. Its main reason was the expectation that innovation like some other types of pedagogical activity would lose its relevance over time. According to the survey results, 3.17% of respondents still consider innovations as temporary tendencies in pedagogical activity. The Western European and other developed countries have formed a positive attitude to innovation and recognized it as an essential attribute of modern life earlier than in Russia. For example, Guillermo Orozco-Gómez (2006) writes that innovations are regarded as eternally desirable and as such should be accepted by groups and individuals without questioning their legitimacy or even desirability.

Russian teachers' passivity towards innovation, and sometimes their innovation resistance, is no exception. Orozco- Gómez (2006) draws attention to Martín-Barbero's strong belief that such type of innovation, as social (that includes innovation in education), implies non-functional differences, as they imply dissent and resistance. He views teachers as a key source of resistance to innovation and writes that the phenomenon of resistance is to some extent a natural part of every educational change and needs to be taken into account. Many years later Vrabcová (2015) notes that despite the 13 years of restructuring of the Czech education system in 2014, the teachers' resistance, and their negative attitude to the change in general or to certain elements has been preserved and now even prevails.

Not all teachers are inclined towards professional dissent and resistance, as they appreciate high professional level and abilities, readiness for self-development, self-actualization and self-realization, as well as for such personal qualities as integrity and courage. However, the problem of overcoming resistance to innovation and innovation passivity still remains. The organization of teachers' cooperation can help to overcome it. Nevertheless, it is necessary to take into account an opinion that resistance to innovation is not necessarily negative; it can be a sign of participation and development (Ketelaar et al, 2012).

At the same time, as Ketelaar et al. (2012) note that there are teachers in the school who identify themselves with innovation, and there are those who rarely find support of their colleagues who do not show interest in innovation and with whom it is virtually impossible to cooperate. Lack of cooperation, according to foreign colleagues, can lead teachers to individual values and beliefs, which, in turn, can contribute either to the adoption of traditions that decrease professional expectations, or to innovations introduced by single teachers alone. In this regard, the leading teachers in the Russian school and in schools in other countries have no one with whom to discuss their new ideas or the results of their practical implementation, which also has a negative impact on the teachers' innovative activity.

Unfortunately, Russian teachers are often not looking for new ideas to create innovations; they prefer ready-made educational development for frequently uncritical use in their work (Savina, 2015). The Teachers' Willingness to Create Highly Intelligent Educational Innovations. *Procedia - Social and Behavioral Sciences* 191 (2015), pp. 2605-2608. This indicates that the serious psychological reason for the Russian teachers' negative attitude to innovation is the gap in their innovative thinking, which involves an inability to search for new ideas, their

development and practical implementation. Innovative thinking is necessary for creativity and is formed in the process of creation. Therefore, in higher educational institutions it is necessary to implement such types of training that contribute to the development of students' flexible thinking, ability to generate ideas, penetration beyond the borders of the acquired knowledge and experience. The primary experience of innovative thinking and innovative activity formed by students will form the basis for creating innovations in their professional activity.

According to Orozco-Gómez (2006), two principles should be followed: first, the learning process should be active, with the participants building their knowledge based on their experience. At the same time, he writes, it is necessary to understand that people do not "get" ideas but "generate" them; secondly, new knowledge becomes especially effective when participants personally create products that are meaningful to them. Consequently, the teacher who has created an innovation and has experience in innovation can feel a sense of ownership towards the innovation he has created and implemented, as well as a sense of satisfaction and, due to that fact, take a more active position in this type of activity. Such a teacher forms, according to Vrabcová (2015), a pro-innovative attitude, characterized by positive assessments and emotions, openness to changes, as well as a tendency to participate in educational transformations.

6 Conclusion

The major factors that determine the Russian teachers' innovation resistance are social, psychological and professional. Due to the fact that the conditions for increasing innovation activity in the country have been created, the main reasons that are revealed by the content of the social factor, and that reduce the teachers' innovative activity are: 1) insufficient social prestige of professional pedagogical activity; 2) insufficient level of teachers' awareness of competition in the pedagogical environment and its role in their professional and personal life.

The main objective professional reason that predetermines the teachers' innovation resistance in modern comprehensive school is insufficient attention of the higher school that trains specialists in "Pedagogical education" (Bachelor degree) to formation of graduates' readiness and development of their abilities to implement innovative activity at school. The most essential subjective psychological reasons as components of psychological factor connected with professional activity include the following: work at school not on vocation; teachers' orientation towards the use of ready-made developments, rather than the creation of original educational products; the inability of the majority of modern teachers to form a valuable attitude towards innovative activity and insufficient development of

their innovative thinking; prevalence of personal friendship, and not professional cooperation within the teaching staff (especially in the field of innovation); lack of teachers' sense of ownership in relation to innovations and innovative activity. The psychological reasons related to the teacher's individual and personal characteristics include the lack of personal conviction in the necessity to be engaged in innovation activities at school; orientation towards settling personal "quiet" life and not "restless", and time-consuming innovative activities. The revealed subjective reasons determine the urgency to form undergraduate teachers' motivation to innovate.

Due to the elimination of some social causes that impede the increase of the teachers' innovative activity in Russia, there is a tendency to overcome the teachers' innovation resistance. Modernization of teachers' training for their professional activity can significantly contribute to accelerate the process and increase its efficiency. Taking into account the opinion of foreign researchers that diffusion of ideas makes no sense (Orozco-Gómez, 2006), it is necessary to radically change the nature of the process of teacher training (its purpose, objectives, content and the process itself, strengthening its axiological and motivational components). In reference to school teachers, the heads of educational institutions should actively involve them in the collective forms of intra-school innovation, instilling in them a psychological sense of being the "owner" of innovation, involving them in the process of understanding innovation as well as in active innovation, which will provide them with cognitive and emotional energy. The modern secondary school needs an innovation leader who could be both a teacher and the head of a school and who would be able to motivate teachers to innovate, stimulate their cooperation and at the same time respect the teacher's identity and individuality.

The analysis of the teachers' resistance to innovations and some solutions to it shows that the problem is typical for general secondary education in many countries. Main factors and reasons determining the teachers' innovation resistance could be taken into account when preparing them for innovative activity as a crucial factor for modernizing the country's education system.

Principais fatores de resistência dos professores às inovações

Resumo

A modernização e a melhoria da qualidade do ensino secundário podem ser alcançadas, enquanto se melhora a atividade inovadora dos professores. Portanto, é importante identificar e fundamentar os fatores e as razões da “passividade” inovadora dos professores do ensino médio, que é o objetivo deste trabalho. O estudo contribui para eliminar esses fatores durante o curso de formação de professores e preparar os alunos para obter um diploma em educação para atividades inovadoras e melhorar a eficácia dos professores em exercício. Uma característica distintiva do estudo é o fato de que ele aplica uma abordagem ampla que permite identificar fatores sociais, psicológicos e profissionais, incluindo grupos relevantes interrelacionados de razões, objetivas e subjetivas, que predeterminam a resistência dos professores às inovações. A pesquisa empírica revelou um declínio nos efeitos negativos dos fatores sociais e psicológicos nos últimos anos e uma substancial influência moderadora do fator profissional nas atividades inovadoras dos professores.

Palavras-chave: *Atividade profissional. Passividade inovadora. Resistência a inovações. Atividade inovadora. Professores. Fatores. Causas. Ensino secundário.*

Factores principales de la resistencia de los profesores a las innovaciones

Resumen

La modernización y el mejoramiento de la calidad de la educación secundaria general se pueden lograr al mismo tiempo que se mejora la actividad innovadora de los docentes. Por lo tanto, es importante identificar y fundamentar los factores y las razones de la “pasividad” innovadora de los maestros de secundaria, propósito de este trabajo. El estudio contribuye a eliminar estos factores durante el curso de capacitación de maestros y la preparación de los estudiantes para obtener un título en educación para actividades innovadoras y a mejorar la eficacia de los profesores en ejercicio. Una característica distintiva del estudio es el hecho de que aplica un enfoque amplio que permite identificar factores sociales, psicológicos y profesionales, incluidos grupos interrelacionados relevantes de razones objetivas y subjetivas que predeterminan la resistencia de los maestros a las innovaciones. La investigación empírica reveló una disminución en los efectos negativos de los factores sociales y psicológicos en los últimos años y una influencia moderadora sustancial del factor profesional en las actividades innovadoras de los docentes.

Palabras clave: *Actividad profesional. Pasividad innovadora. Resistencia a las innovaciones. Atividade inovadora. Maestros. Factores. Causas. Educación secundaria general.*

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