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## Monitoring Young Teachers' Readiness to Innovation Activity in a Modern School

Irina V. Kuzina (a), Valentina F. Mironycheva\*(b)

(a), (b) Lobachevsky State University of Nizhny Novgorod (Arzamas branch), 607220, Arzamas (Russia), 36 K.Marksa street

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### Abstract

The relevance of monitoring the young teachers' readiness to innovate is attributed to the requirements of modern school development. The transition to a new format of relations between the subjects of the educational process dictates a new teacher to be capable of the purposeful pedagogical activity, able to comprehend personal pedagogic experience through comparing, studying and analyzing domestic and foreign practices of training and education. The purpose of monitoring is aimed at identifying young teachers' professional competences formation as the basis for achieving high results of the pedagogical activity, the development of the necessity of testing pedagogical innovations that affect the quality of education and teacher personality development. Current observation, test situations, explication and survey methods became the leading methods of monitoring the young teachers' readiness to an innovative activity under the conditions of a modern school. Monitoring included express diagnosis which took place during the pedagogical practice at the graduation course, and final diagnosis (the beginning of independent professional activity as a teacher). The article presents the system of innovative activity monitoring at the stage of "professional pedagogical training – independent professional pedagogical activity". The system includes specially designed questions for an express diagnosis, aimed at identifying the creative abilities to create and develop new ideas in the field of education and the readiness to implement in practical forms, as well as specially selected and developed test situations aimed at identifying conscious professional development.

*Keywords:* education monitoring; innovative pedagogical activity; young teacher; pedagogical activity; pedagogic practice; modern technologies.

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\* Corresponding author. Tel.: + 79196415246; e-mail address: mironycheva52@mail.ru

## **Introduction**

The current stage of development of education in general, school education in particular, requires the activities monitoring system aimed at identifying the strong and weak points of the pedagogical process's structural components (target, meaningful, activity and effectiveness components). Particular attention is paid to analyzing the effectiveness of interaction between teachers and students, cooperation, organization and management of the process, which makes it possible to achieve the final result which is the development of a highly spiritual citizen of the Russian society. The development of children and adolescents' personal qualities depends on how teachers carry out educational and training functions; the ability to respond adequately to various innovations and to apply them in practice, the skill of reflection allow students to adapt to the conditions of the modifying society. It is the teacher's attitude to the ongoing political, economic, cultural and other transformations and changes that determine the vector of the professional development. Thus, one of the descriptors of a teacher's professional competence formation is the willingness to innovate in a modern school.

## **Purpose and objectives of the study**

The monitoring was aimed at identifying the formation of young teachers' professional competencies as the basis for achieving high results in pedagogical activity, the development of the need for testing pedagogical innovations that affect the quality of education and the teachers' personality development.

## **Literature review**

During the last decade, the focus of scientists is 'innovation' as an important component of the pedagogical process and the criterion of the effectiveness of educational activities (Bryan & Clegg, 2006). Thus, Khutorskoy (2008) considers the types (in relation to structural elements of educational systems, in relation to personal formation of the subjects of education, the types of interaction among participants of the pedagogical process, the functional capabilities, methods of implementation, social and pedagogic significance, degree of the expected changes) and the mechanisms of pedagogic innovations implementation; describes the innovative educational activities in details. Analyzing the innovative educational process, the scholar gives justification to pedagogical innovations implementation; factors interfering with them; reflections in innovative and pedagogic activity (Ogur et al., 2007; Christensen & Eyring, 2011).

In connection with the introduction of innovations (Varsakelis, 2006), the problem of monitoring the young specialists' readiness for innovative activity is one of the most important questions in modern pedagogic science and in school practice. Volodina (2016) pays attention to forming the readiness for innovative activity in the process of students, undergraduates and postgraduates language training. The researcher reveals the essence of the 'specialist readiness for innovation' concept, defining it as 'an integrative set of properties and qualities of an individual'. Volodina (2016) pays special attention to the formation of, firstly, general cultural, general professional, professional and professional-specialized competencies; secondly – to creative thinking; thirdly – to professionally significant personal qualities.

Shelekhova (2012, p. 327) gives a detailed analysis of the process of innovative behavior formation among university students, defining it as 'an initiative type of personality behavior, including the ability to perceive, create, implement innovations, timely get rid of outdated, inappropriate experience, as well as creative aspirations of an individual to transform the existing reality'.

The works of Korostelev (2011) are devoted to ensuring students' readiness for innovative activity under the conditions of the innovation-oriented educational and research environment of the educational institution. The scientist identifies innovative and professional tasks aimed at 'teaching future specialists innovative activity' (Korostelev, 2011, p.126). The developed model of innovation-oriented educational and research environment gives a complete picture of the dependence and unity of the principles, functions, characteristics, and components included in its structure.

Muratova and Fedorov (2008) considering the interrelation of innovative activity of a Bachelor, a certified specialist, and a Master allocate its variable and different components. According to the scientists, the readiness for innovation is understood as the formation of a practice-oriented competence expressed in the person's psychological state and preparedness in the subject area. The researchers emphasize that the selected criteria and indicators for assessing the readiness for innovation affect the main directions of identifying the results of training and may vary depending on the tasks (Muratova & Fedorov, 2008).

The solution to the problem of monitoring the readiness for innovative activity can be found in the work 'Pedagogical conditions of students' preparation for innovative activity at school' by Maximov (2011), where the scientist defines the essence of pedagogic innovative activity, develops didactic model of readiness for it, also reveals pedagogical conditions which make it possible to provide efficiency of students' preparation for innovative activity (Maksimov, 2001). In general, it should be noted that one of the most important tasks of training a modern teacher, disposed and capable of innovation in the real educational environment of an educational organization, is solved both at the theoretical and practical levels.

### **Methodology**

Current observation, test situations, explication and survey methods became the leading ways of monitoring the young teachers' readiness for innovative activities in the conditions of a modern school.

An express survey was conducted at Arzamas branch of the Lobachevsky State University of Nizhny Novgorod and educational institutions of Arzamas city and rural areas.

Monitoring the young teachers' readiness for innovative activity included express diagnosis which took place during the pedagogical practice at the graduate course, and final diagnosis (the beginning of independent professional activity as a teacher).

### **Results**

For express diagnosis, issues aimed at identifying abilities to create and develop new ideas in the field of education and the desire to implement them in practical forms were developed. Particular attention is paid to forming such qualities as efficiency, high emotional state, knowledge of new technologies, mastering new methods of training and education, the ability to develop projects, analyze and identify the causes of negative points and failures, the ability to reflect.

For the final diagnosis, specifically selected and developed test situations aimed at identifying conscious professional development were used. Young teachers were offered pedagogic tasks, finding answers to which took place in specially created conditions. Working on the problem meant different ways of solution. Depending on the respondent's moves and actions, it was possible to make a conclusion about the readiness for innovative activity under the conditions of a modern school.

At the stage of expert diagnosis (November-December 2017), students of five courses (82 people) studying in the field of pedagogy, within the framework of pedagogical practice as a subject teacher, in

order to determine the formation of personal qualities that make it possible to see the degree of readiness for innovation, it was proposed to answer three questions:

1. What is innovation?
2. What can I do as a subject teacher and class teacher?
3. What educational technologies do I have?

Out of 82 people, 37 (45%) understood innovation as ‘novelty related to the ability to integrate something non-standard in teaching’; 28 respondents (34%) focused on the fact that it is ‘modern new technologies used in teaching practice’; 17 students (21%) defined the term as ‘the introduction of Federal State Educational Standards into General education’.

As for the second question, 66 people (80%) answered that they are able to ‘manage a class team’, ‘teach a lesson in a problematic situation (when the light is turned off or the computer is not functioning)’; ‘create a comfortable atmosphere in the classroom’ etc. 16 people (19,5%) associated skills with personal qualities: ‘listen carefully and understand students’, ‘analyze their own actions’, ‘adapt other people's teaching materials for specific purposes of their own lesson’; ‘not take offense at the comments’ and so on.

Speaking about the third question, all students (100%) gave a definite answer: ‘I can use all information and communication technologies’.

Express diagnostics shows that graduate is identified with subject teachers and class teachers. Observing how students answered the questions shows that future teachers are ready to work in the innovative educational school environment, but there is no clear idea of what exactly is included in the concept of "innovation" and how to include innovations in their own teaching activities.

At the final diagnosis stage (February 2019), young teachers (62 graduates of 2018, studying in the field of pedagogy and working accordingly as teachers and previously involved in express diagnosis) were offered the following tasks:

1. How to plan the stage of explaining new material that requires clarity and a high degree of science?
2. How to adapt the scientific material to younger teenagers’ age peculiarities?
3. If we assume that revising the previously passed material is planned for the last school day before the holidays or for the first lesson after the holidays, how is it possible to ‘include’, for example, eighth-graders in the educational process quickly and effectively?
4. How to motivate a teenager to productive activities during homeroom study devoted to civil and patriotic topics?
5. How to interest a student in project research activities?
6. What should a student do to learn how to apply the theory in practice?
7. Suppose that at the 9th form 80% of students do not like to perform creative tasks that require studying additional literature, analyzing the educational environment of the Internet and being able to work with computer programs; how can such students be convinced that creative tasks, despite being time-consuming, bring intellectual joy?

Each of the young teachers was offered all the problem situations, but no comments were given, for example, how to read the conditions of the tasks and formulate answers, what to pay attention to. Former graduates had the opportunity to think over the mechanism of independent decision-making.

To see young teachers’ readiness to innovate in a modern school it is important to analyze the respondents’ mental process, their reaction to the essence of the job. The observation showed that 23 graduates (37%) independently gave one answer to all seven questions. The solutions were step-by-step

actions related to the 'student inclusion in educational activities'. Particular attention is paid to the teacher's ability to use various methods and techniques, as well as technologies that 'allow making learning and education productive and practice-oriented'. 21 respondents (33%) divided the proposed tasks into two groups and tried to give two interrelated answers: the first part was a reflection on innovation including scientific terminology, and the second illustrated 'how it is possible to organize effective interaction of the teacher and the pupil in practice'. 14 young specialists (22,5%) before solving all the proposed questions, subject to a thorough analysis of their formulation. For example, first a subject of the educational process (junior teenager, eighth grader, teenager, student of the ninth grade) was chosen, and only then the possible solutions based on the age characteristics of students were proposed. The young teachers with little experience have answers which contained variability reflecting a variety of scenarios: ('if..., then...'). 4 respondents (22,5%) refused to answer the questions after reading the tasks.

According to the final diagnosis, the approaches to solving problems by young specialists show their non-standard pedagogical thinking, which was already an indicator of readiness for innovative activity in a modern school.

### **Discussions**

Monitoring of young teachers' readiness for innovative activity under the conditions of modern school affected the period of professional growth of graduates motivated to pedagogical activity at the stage of succession (to call it provisionally) 'professional pedagogic training – independent professional pedagogical activity'. Tasks of different levels of difficulty and complexity depending on the degree of respondents' preparedness and their own teaching experience were offered. The process of finding answers to the questions posed was also significant. According to the results of the research, in order to compare the degree of young teachers' readiness to innovate, it is advisable to include a repetitive task in the monitoring both at the stage of express diagnosis and at the stage of final diagnosis (for example, 'to determine the key problem of the question(s)').

### **Conclusion**

The monitoring of the young teachers' readiness for innovative activities carried out on specially developed issues led to the conclusion that the graduates, firstly, formed professional competence; secondly, developed innovative consciousness. They are open to everything new, able to analyze and offer paradoxical solutions to pedagogical situations. Young teachers have a need for successful innovation.

In general, the monitoring shows the effectiveness of training a new generation of teachers who are able to innovate. The most important thing deserving attention is the removal of innovative barriers both in the learning process and in the first year of work in an educational institution.

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