

Innovative activity of teachers: Study and directions of development

La actividad innovadora de los pedagogos: El estudio y la dirección del desarrollo

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ABSTRACT:

In the article the results of diagnostics of teachers' willingness to innovative activity in educational organization are presented. It has been established that the readiness to introduce innovations in professional activities among teachers depends on the level of motivation to focus on success, the need to avoid failure, and the peculiarities of value orientations.

Keywords: innovations, teacher, willingness to innovative activity, development of innovation.

RESUMEN:

Se presentan los resultados del diagnóstico de la voluntad de los docentes de una actividad innovadora en la organización educativa. Se presentan los resultados de diagnóstico de la preparación de los educadores para la innovación en la organización educativa. Se ha determinado que la preparación para innovar en la actividad profesional de los educadores depende del nivel de motivación para el éxito, la necesidad de evitar el fracaso y las características de las orientaciones de valor.

Palabras clave: liderazgo, institución educativa preescolar, estilo de gestión, habilidades de líder, desarrollo de la innovación

1. Introduction

In the works of Bezrudny F., Smirnova G. and Nechaeva O. (1998) it is said that in modern conditions, pedagogical innovation is considered as the main factor in the development of the education system.

In the recent works of Vcherashny R. and Sukharev O. (2000); Rerke V., Bubnova I. & Tatarinova L. (2019) it is emphasized that in whatever aspect the development of education is considered (as reforming, modernization or optimization), from whatever position innovations in education would be analyzed (in terms of the scale of innovations, according to the criterion of objective and subjective novelty; from the standpoint of the process or result), in any case, factor relations between innovation and the development

of the education system are preserved.

A number of studies have shown that the reason is as follows. In the analysis of the available resource for the implementation of an innovative project in the institution the personnel resource is considered from the perspective of professionalism of teachers – the institution has a lot of high-level teachers, methodologists, providing high results of educational activities, therefore, there's always someone who can perform the innovative project. At the same time, it is not taken into account that a highly qualified teacher is a teacher with a high readiness for professional pedagogical activity, but innovative activity is fundamentally different from pedagogical activity, and, consequently, readiness for pedagogical activity even at the highest level does not guarantee the readiness of this teacher for innovative activity. Accordingly, the analysis of the personnel resource implementation of the innovative project in the institution should include the study of the readiness of the teaching staff to innovation. No doubt the research of motivational readiness of teachers to innovation in the educational organization is of particular interest.

2. Methodology

The diagnosis of motivational readiness for innovation is quite an important problem in the field of innovativeness research. In this regard, a number of diagnostic techniques are currently available and used in practice.

For the diagnosis of personality traits that determine the innovativeness of teachers, we used the following methods: Curton's M. questionnaire "diagnosis of the subject's innovation" (Curton's M., 2002).

The test technique of Curton M. "diagnosis of the subject's innovation" (Curton's M., 2002) makes it possible to establish how difficult or easy a person retains the features of innovative or adaptive behavior over a long period of time.

We used the method of personality diagnosis based on the "motivation for success" or "motivation to avoid failures" by Ehlers T. (2006), the method of "value orientations" by Rokich M. (2006) to study the motivational sphere of teachers.

The questionnaire by Ehlers T. "motivation for success" (Ehlers T., 2006) is designed to diagnose the motivational orientation of an individual towards success. The test result "motivation for success" was compared with the results of the test "motivation to avoid failures" (Ehlers T., 2006).

When diagnosing a person to identify the motivation for success, Ehlers T. (2006) assumed that a person who has a motivation for success prefers a medium or low risk level. This person tends to avoid high risk. With a strong motivation for success, hopes for success are usually more modest than with a weak motivation for success, but such people work hard to achieve success, strive for success.

"Value orientations" by Rokich M. (2006) made it possible to identify the value-meaning areas of the individual. The system of value orientations determines the content direction of the personality and forms the basis of its relationship to the world, to other people, to itself, the basis of the world view and the core of the motivation of life activity, the basis of the life approach.

The technique of "value orientations" by Rokich M. (2006), is based on direct ranking of the list of values. Rokich M. distinguishes two classes of values:

terminal - the belief that some ultimate goal of individual existence is worth it to strive for; instrumental - the belief that some kind of action or property of the individual is preferred in any situation. This division corresponds to the traditional division into value-goals and value-means.

The study took place on the basis of Irkutsk secondary school. The study involved 58 teachers aged 23 to 65 years. Work experience in the specialty ranges from 1 to 35 years. All examinees were women. Taking into consideration their position they are subject teachers, primary school teachers, as well as 3 managers - Deputy Directors.

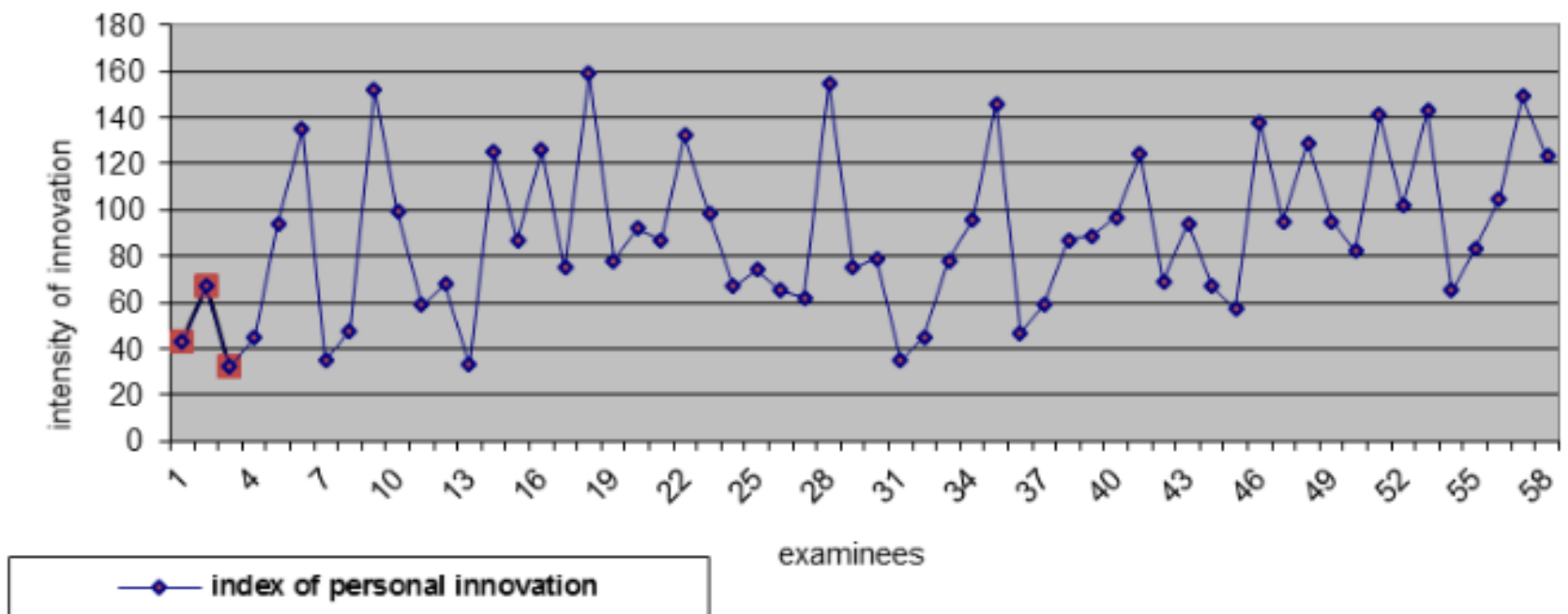
3. Results

Analysis of the results presented in Fig.1. shows that the studied sample of group of teachers is characterized by a large variety of personal innovativeness. The minimum index of personal innovativeness was fixed at the level of 32-35 points and was found in 3 teachers characteristics (subjects 3, 13, 31). The maximum index of personal innovativeness was recorded at the level of 159 points (subject No. 18). According to the studied indicator, the sample has a wide range of indicators ($\sigma = 35.078$), which demonstrates its heterogeneity.

The study of the personal innovation formation of teachers as subjects of pedagogical activity was started with the test method of Curton M., which allows to identify how difficult or easy a person retains the features of innovative or adaptive behavior for a long period of time. The results obtained during the processing of the test method are shown in Fig.1.

Figure 1

The manifestation of the index of teachers personal innovation



The presence of a high index of innovativeness was revealed in 15 teachers' characteristics. Its indicator ranged from 120 to 159 points. This group included 5 teachers of an educational institution and one leader (subject No. 9). In the process of choosing the answers to the questionnaire, these subjects chose a high degree of agreement (4-5 points) on statements about attractiveness to people who often change their profession, about readiness to take risks in their professional activities when it comes to an interesting new project, about their tendencies to disturbing the team and so on. This group of examinees (subjects) can be referred to innovators.

The presence of a low index of innovativeness was revealed in 13 teachers characteristics. There were no management representatives (leaders) from educational institutions in this group. Individual indicators of the innovativeness index for this group of subjects ranged from 32 to 60 points. In the process of working with the questionnaire, these subjects showed disagreement (1-2 points) with regard to taking risky events, which may bring positive results later; manifestation of conservatism with regard to changes occurring in society; a negative attitude towards reforms.

The rest of 30 teachers, including 2 managers, demonstrated an average value of the index innovativeness, which ranged from 61 to 119 points. These subjects showed agreement (4 points) regarding readiness for changes occurring in their professional activities, neutral results were observed in statements regarding the manifestation of their own initiative to implement a reform in activity (3 points); negative attitude, disagreement (1 point) in relation to willingness to invest their own funds in risky events.

Thus, according to the results of the innovativeness diagnosis by M. Curton, the subjects

as a whole, are characterized by different levels of personal innovativeness, the polarity of the agreement manifestation in relation to the reforms and teachers' personal contribution to the implementation of reforms in their professional activities

We identified teachers who demonstrated high levels of personal innovation in the first group. We identified this group as a group with a high degree of readiness for innovation, and it included 5 teachers. An interesting fact is that only 1 leader entered this group - examinee No. 9.

The second group was formed by teachers who demonstrated average indicators of personal innovation. We identified this group as a group with an optimal degree of readiness for innovation, and it included 9 teachers. In this group of subjects there was the head teacher of primary classes (test number 52).

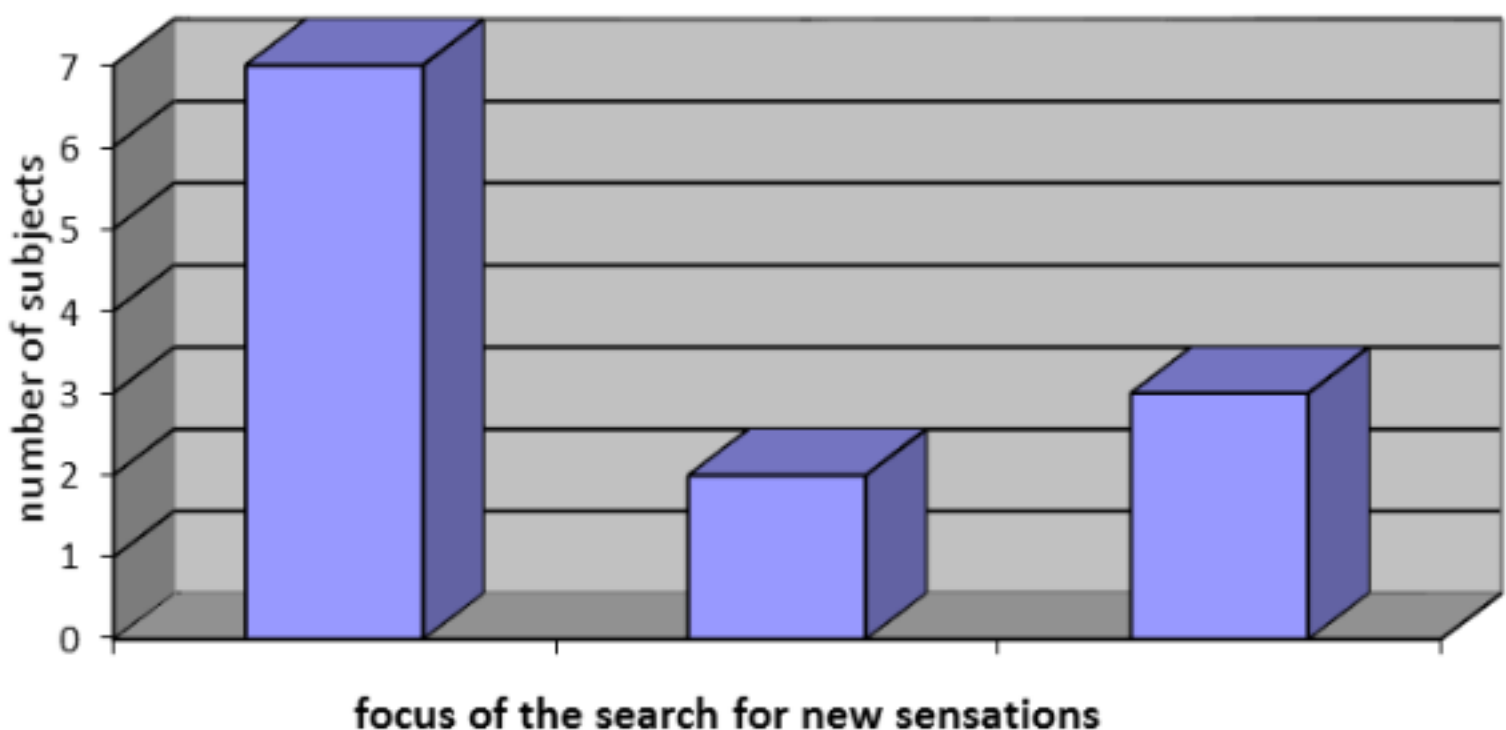
We identified teachers who showed average or below average indicators of personal innovation normative or with a tendency to high personal and situational anxiety, with optimal or a tendency to a low manifestation of the need for new sensations and risk appetite in the third group. We have designated this group as a group with insufficient degree of readiness for innovative activity, it included 34 teachers. To ensure the dynamics of their professional growth, to ensure their readiness for innovation, these teachers need special psychological support.

We identified teachers who demonstrated low rates of personal innovation and creativity, normative and with a tendency to high rates of personal and situational anxiety, with optimal or low manifestation of the need for new sensations and risk readiness in the fourth group.. We identified this group as a group not ready for innovation and it included 7 teachers. These teachers are not ready for innovative activity and because of their individual characteristics they can not implement it under any circumstances.

We identified teachers who demonstrated high rates of personal innovation and creativity, low rates of personal and situational anxiety, a high need for new sensations and readiness for risk in the fifth group. We identified this group as a group not ready for innovation and it included 3 teachers. We define the lack of readiness for innovative activity of this group of teachers as the impossibility to estimate the situations of professional activity really because of the tendency to overestimate their capabilities Fig.2.

Figure 2

The level of readiness of teachers to innovate.



At the next stage of the investigation, we studied the features of the motivational sphere of teachers. For the study of motivational sphere of teachers we used the technique of diagnostics of personality on "motivation for success" or "motivation to avoid failures" by Ehlers T. (2006), the method "value orientations" by Rokich M. (2006).

The study of the motivational sphere of teachers showed that teachers from the sample group are characterized by the following features of the motivational sphere: teachers, which we have divided into different groups, are characterized by varying degrees of expression of the motivation level for success. Representatives of group 1 - teachers with a high degree of readiness for innovation are characterized by a moderately high and medium level of motivation for success. Representatives of group 2 - teachers with an optimal degree of readiness for innovation are characterized by the presence of medium, moderately high and low level of motivation for success. Representatives of group 3 - teachers with a lack of readiness for innovation are characterized by the most pronounced average level of motivation for success. Group 3 is the largest and includes examinees who have shown a moderately high, low and very high level of motivation for success. For test subjects 4 and 5 groups - teachers are not ready for innovation; they are characterized by a manifestation of either low or very high motivation for success in the two groups, correspondingly.

Next, we present the results of a sample study on the method of diagnosing an "individual for the motivation to avoid failure" (Ehlers T., 2006).

Thus, the representatives of the 1st group - teachers with a high degree of readiness for innovative activities are characterized by the presence of an average level of motivation to avoid failures. Representatives of group 2 - teachers with an optimal degree of readiness for innovation are characterized by the presence of an average and moderately high level of motivation to avoid failures. Representatives of the 3rd group are teachers with an insufficient degree of readiness for innovation, characterized by all the options for the manifestation of the motivation to avoid failures — from low to very high, depending on their own personal characteristics. For subjects 4 and 5 groups - teachers who are not ready for innovation are characterized by different manifestations of motivation to avoid failures in the two groups, respectively.

The central value in the course of the study was devoted to the study of the value orientations of teachers with different levels of readiness for innovation. For this, we used the method of "value Orientations" by Rokich M. (2006). The results obtained during its implementation are presented in table 1.

Table 1
 Leading values of teachers with different levels of readiness for innovation
 (A sample of fixing the results of "value Orientations" test)
 (Rokich M., 2006)

Value orientations	1 group	2 group	3 group	4 group	5 group
terminal	Active life Interesting work Material secured life Public recognition Creativity	Life wisdom Health Interesting work Material secured life	Health Love Public recognition Happy family life	Happy family life Life wisdom Health Material secured life	Public recognition Material secured life Productive life Self confidence
instrumental	Independence Education Responsibility Breadth of views	Sense of duty Education Responsibility Efficiency in business	Good breeding Cheerfulness Education Responsibility	Good breeding Education Tolerance Sensitivity	Cheerfulness Education Responsibility Self-checking

From the results obtained in the course of the study, we see that the sample group we deal with is characterized by different indicators of motivational and value sphere of teachers, depending on the level of their readiness for innovation.

Representatives of group 1 - teachers with a high degree of readiness for innovation are characterized by the presence of terminal values - active life, interesting work, material prosperous life, public recognition, creativity and instrumental values - independence, education, responsibility, open-mindedness.

Representatives of the 2nd group-teachers with an optimal degree of readiness for innovation are characterized by the presence of terminal values – life wisdom, health, interesting work, material well – being and instrumental values-diligence, education, responsibility, efficiency in business.

Representatives of group 3 are teachers with a lack of readiness for innovation, they are characterized by terminal values – health, love, social recognition, happy family life and instrumental values – education, cheerfulness, education, responsibility.

For teachers who do not have the psychological readiness for innovation, it is typical: for the 4th group - terminal values - happy family life, life wisdom, health, material prosperous life and instrumental values - education, education, tolerance, sensitivity; for the 5th group - terminal values - public recognition, material prosperous life, productive life, self-confidence and instrumental values - cheerfulness, education, responsibility, self-control.

Thus, we can conclude that teachers of educational institutions are characterized by different levels of psychological readiness for innovative activities. The results of the study showed that modern teachers are characterized by different levels of psychological readiness for innovation.

4. Conclusions

The study of motivational readiness for innovation showed that teachers with different levels of psychological readiness for innovation have different features in their motivational sphere.

Teachers with a high degree of readiness for innovation are characterized by the presence of terminal values - active life, interesting work, material prosperity, public recognition, creativity and instrumental values - independence, education, responsibility, open-mindedness.

Teachers with an optimal degree of readiness for innovation are characterized by the presence of terminal values - life wisdom, health, interesting work, material well-to-do life and instrumental values - performance, education, responsibility, efficiency in business.

Teachers with a lack of readiness for innovation are characterized by terminal values – health, love, social recognition, happy family life and instrumental values – education, cheerfulness, education, responsibility.

Teachers who do not have a psychological readiness for innovation are characterized by the manifestation of terminal values associated with a happy family life, wisdom or social recognition and material security. The instrumental values of this group of teachers are focused on good breeding and education or cheerfulness and responsibility.

In further work on the development of innovative thinking it is worth considering that innovation involves the ability of the subject both to perceive and comprehend, and if necessary, modify and implement new original ideas; in the practice of working the procedures can be used that are aimed at the development of its two parts mentioned. On the one hand, it is necessary to direct efforts to increase the sensitivity of the subject to the new and non-standard, and on the other-to develop the ability to operate these products of creative activity.

Based on the results of the study, we consider it advisable to recommend the implementation structural-functional model of the formation of teachers' readiness for

innovation into the practice of institution. That model includes:

- the actualization of personal resources in the perception and implementation of pedagogical innovations;
 - interpretation of existing experience and innovative simulation value space of innovation;
 - familiarity with pedagogical innovations and structuring methods for their implementation in teaching practice;
 - assessment of the situation of uncertainty and risks in the implementation of pedagogical innovations;
 - prevention of psychological barriers in the perception and implementation of pedagogical innovations,
 - the analysis of the root causes of barriers to innovation;
 - technology development of interaction skills of teachers in the development and innovation;
 - reflection obtained innovative experience.
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Bibliographic references

Christensen, K.S. (2006). Losing innovativeness: the challenge of being acquired// Management Decision. 2006. 44. 9. 1161–1182.

Diagnosis of the subject's innovation (M. Curton's) (2002) / Fetiskin N. P., Kozlov V. V., Manuilov G. M. Socio-psychological diagnostics of personality development in small groups. - M. P. 59-64.

Gracheva, M.V, Kulagin, AS, Simaranov, S.Yu. (2001)/ Innovative entrepreneurship, its risks and security // Innovations. No. 8-9.

Motivation for success (Ehlers T.) (2006)/Raygorodsky D.Ya. Practical psychodiagnostics. – Samara. p. 389-390.

Motivation to avoid failures (Ehlers T.) (2006)/ Raygorodsky D.Ya. Practical psychodiagnostics. – Samara p. 391-392.

Neverkovich, Sergey D.; Bubnova, Irina S.; Kosarenko, Nikolay N.; Sakhieva, Regina G.& Sergeeva, Marina G. (2018). Students' Internet Addiction: Study and Prevention // EURASIA Journal of Mathematics, Science and Technology Education. 4(4). p. 1483–1495.

Rerke, Viktoria I.; Sukhostavska, Yuliia V.; Krashenninnikova, Natalia A.; Khvataeva, Nataliya P.; Sakharova, Natalia S.; Rogozhnikova, Raisa A. (2018). Ethno mediation in international conflicts prevention in conditions of polyethnic educational environment// Revista ESPACIOS. Vol. 39 (Nº 20): Page 9.

Rerke, Viktoriya I.; Bubnova, Irina S.; Tatarinova, Larisa V.; Berinskaya, Inna V.; Babitskaya, Lyudmila A. (2019)/ The leadership problem and style of managing the pedagogical staff of pre-school educational organization// Revista ESPACIOS. Vol. 40 (Nº 8): Page 30.

Value orientations (Rokich M.) (2006)/ Raygorodsky D.Ya. Practical psychodiagnostics. – Samara. P. 395-398.

Vcherashny, R., Sukharev O. (2000). Innovations the tool of economic development// Investments in Russia. №. 1. P. 22-32.

Yagolkovsky, S.R. (2010). Psychology of innovation: approaches, models, processes. Scientific monograph. – M.274p.

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