Psychological Support of Formation in the Future Teachers of Readiness for the Creative-Innovative Activity Within the Context of the Competency-Based Approach

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Abstract: The competency-based approach during the process of preparation of future teachers for the pedagogical activity suggests formation of the professional competence considered as the readiness of teachers for the professional activity. In the modern conditions the issue of formation in the future teachers of readiness for the creative self-fulfillment during the process of the creative-innovative activity at school becomes especially topical. The analysis of the psychological-pedagogical literature concerning the issue under consideration and performance of the ascertainning experiment allowed identifying certain features of the process of formation in the future teachers of the readiness to the creative-innovative activity and determining the degree of formedness of components of this readiness in the conditions of a higher educational institution. The important condition of increasing the efficiency of the process of formation in the future teachers of readiness for the creative-innovative activity is the psychological support provided within a few directions: psychodiagnostics, counseling, trainings. The result of formation in the future teachers of readiness for the creative-innovative activity with account of provision of the psychological support is the creative-innovative competency of a teacher the components of which are: the motivational-value, cognitive, creative, operational and reflexive ones. On the basis of the psychological approach explaining the readiness phenomenon by the formed qualities and capabilities the efficiency of the process of formation of readiness for the creative-innovative activity may be determined by means of analyzing the degree of formedness of creative abilities in students and teachers. Questioning of the teachers speaks of underestimating by them of the significance of creative qualities at that the level of formedness of creative qualities in teachers according to the self-rating list is average. The level of formedness in the future teachers that participated in the ascertainning experiment of readiness for creative-innovative activity may be determined as "above the average". Based on the empirical data obtained the conclusion may be drawn as to impossibility of performance as of the current moment of the creative-innovative activity at school. The results of the experiment determine the necessity of further analysis of the process of forming the readiness for the creative-innovative activity and actualize the issue of the creative self-fulfillment of pedagogues.

Key words: Competency-based approach, professional competence, readiness, psychological support, psychodiagnostics, counselling, training, creative-innovative activity, creative-innovative competence, creativity

INTRODUCTION

The new model of education is related to the competency-based approach suggesting the change in the education paradigm (Verbitsky, 2009). The competency-based approach in its initial version proposed by the developers of the key competences for young Europeans enhances the practical orientation of education; emphasize the operational, skill-related aspect of the result. In the Russian psychological-pedagogical science oriented primarily towards the value-conceptual, content-related, personal components of education the competency-based approach significantly enhances the content of the traditional knowledge-based approach with the actually personal components (Zimnyaya, 2004).

In psychology the term ‘competence’ is defined as the characteristic of the individual psychological resources of a learner including not only the specifically organized system of knowledge but also his intellectual potential expressed in understanding of a problem within one or another area in the efficiency of the chosen solution and acting in a problematic situation (Lokalova, 2010; Ovecharova, 2003). The theoretical framework of formation of the learner’s competence is the established
in the psychology ideas as to bi-directionality of the cognitive synthesis flows by formation of intelligence: “from above” and “from below”. The impact ‘from above’ is considered as presentation of the ordered content of disciplines the assimilation of which forms the structure of the mental activity of learners, ensures the flexibility and mobility of thinking (P.Y. Galperin, V.V. Davydov, Z.A. Reshetova, N.I. Chuprikova, D.B. Elkonin). Upon the impact ‘from below’ formation of the intellectual competence is performed on the basis of development of the mental activity, the targeted and systematic increase in the level of cognitive development in whole.

Implementation of the competency-based approach during the process of preparation of future teachers for the successful pedagogical activity suggests formation of the competences constituting the professional competence of a teacher. In the modern psychological-pedagogical science the term ‘professional competence’ is considered from different perspectives (A.P. Tonkonogaya, N.V. Kuzmina, A.E. Markova, S.S. Zanayev, etc.) and is most frequently interpreted as the result of professional training. Thus, according to V.A. Slastenin, the concept ‘professional competence of a pedagogue’ expresses the unity of his theoretical and practical readiness for performance of the pedagogical activity and characterizes his professionalism. The definition provided by V. A. Slastenin defines ‘professional competence’ through such a category as readiness providing for the presence of the formed pedagogical skills and set of knowledge.

MATERIALS AND METHODS

Main part: The new educational paradigm necessitates the re-evaluation of the value of pedagogical labor, changes in the teachers’ attitude to the professional activity. The increased competition at the market for educational services actualizes the creative kinds of the pedagogical activity, motivates teachers to fulfillment of their creative potential. One of the kinds of the creative pedagogical activity gaining popularity in the modern conditions is the creative-innovative activity. We mean by the creative-innovative activity the productive pedagogical activity the results of which are aimed at increasing the efficiency of the educational process at school by means of the creative activity related to pedagogical creativity and being the potential pedagogical innovations.

Formation of readiness of the students of pedagogical specialties for the creative-innovative work at school is the key condition for improvement of its efficiency. Readiness of future teachers for the creative-innovative activity is considered as the expected result of the targeted professional training expressed in the value-based attitude of a person to the creative-innovative activity, formed motivation to performance of this activity, mastering the system of knowledge and skills in the area of pedagogical innovation studies and innovative processes, presence of certain experience in creation and implementation of pedagogical innovations, reflexing skills and the set of professional-personal qualities promoting to enhancement of efficiency of the creative-innovative activity. Formation of readiness of future teachers for the creative-innovative activity represents a complex process implemented within the frameworks of academic preparation of future teachers for the professional activity.

The effective process of formation in the future teachers of readiness for the creative-innovative activity is possible upon provision of the pedagogical and psychological aspects. The key condition is the psychological support. It is provided by means of creating the psychological conditions within the following directions: psychodiagnostics, students and teachers counseling, trainings.

Psychodiagnostics is an essential form of the psychological practice that is related to design and application of various methods of identification of individual psychological features of a person.

The tasks of psychodiagnostics during the process of formation in the future teachers of readiness for creative-innovative activity do not include determination of the level of formedness of the students’ readiness for the creative-innovative activity and its separate components. Its task by implementation of the process of formation of readiness for the creative-innovative activity is identification of individual features and problems in all of process participants. While psychodiagnostics is aimed at identifying the peculiar features of the human mind, his personal qualities, socio-psychological phenomena, the pedagogical psychodiagnostics is aimed at determining the results of education and training, formation and development of a person manners, literacy, readiness for activity, competency and pedagogical conditions for achievement of these results as well as at characterizing the integral pedagogical system (Yefremov, 2013).

The tasks of psychodiagnostics during the process of formation in the future teachers of readiness for creative-innovative activity are solved in a few ways. Firstly, the students are observed in the real conditions. Diagnostic observation is performed in the presence of the specific research objective, the knowledge
of the properties and qualities being observed. The situations are created that require from the students to demonstrate those qualities and capabilities that will be the demanded under the real conditions of performing the creative-innovative activity at school. Thirdly, during the process of formation in the future teachers of readiness for creative-innovative activity the psychodiagnostics methods are used: testing, self-ranking method, projective techniques. As compared to other techniques the psychodiagnostics methods feature a number of advantages determining their reliability and validity: obtaining reliable information, the qualitative and quantitative data about the respondent for comparison of him with the other process participants, possibility of forecasting the student's behavior, determining the dynamics of his development.

Psychodiagnostics is performed with the use of the testing methods, polling methods, observation methods enabling estimating the new formation in a personality, assessing the mental condition of students and teachers. The process of psychodiagnostics includes data collection, analysis and interpretation, formulation of conclusions and making of the psychological forecast. The results of diagnostics also include conclusions as to which psychological aspects of the process of formation of readiness for creative-innovative activity at school require increased attention and adjustment.

Psychodiagnostics acts as the set of methods and techniques of identification of psychological features of a person for further impact on it. Analysis of psychological and psycho-physiological features of students during the process of psychodiagnostics promotes to the effective organization of the process of formation in the future teachers of readiness for the creative-innovative activity. Psychodiagnostics constitutes the basis of counseling. Consultations, recommendations and advice are only possible upon the previous analysis of the personality being consulted in terms of the issues causing concerns.

By means of psychological counselling the students get professional support and assistance in recognition of their strong and weak points, evaluation of their thoughts, actions, identification of their professional and personal values and priorities, in making correct decisions and their liability for them, etc. Counselling allows optimizing the interaction of students with each other with the teachers, helps them to develop their own strategy of professional self-determination, establishment and development.

Counseling of the pedagogues involved in the process of formation in the future teachers of readiness for the creative-innovative activity promotes to activation and correction of the communication skills, enhancement of behavior ambitions, increase in the efficiency of interaction between partners in the format 'teacher-student'. Consultations by our psychologists provide a pedagogue with additional methods of impact on the student’s personality for the purpose of formation of the desired qualities, capabilities, motives and goals, helps to sort out oneself and the own deeds to find the optimal solution of the contradictory situations without the threat of demotivating students and decreasing their cognitive activity. Counseling of students and teachers shall be performed simultaneously and feature sustainable and not spontaneous nature.

Psychological counselling during the process of formation in students of pedagogical specialties of readiness for creative-innovative activities at school is not aimed at correcting the pathological symptoms, ensuring the personal development of a student or establishment of special therapeutical relationships. It promotes to solution of the issues of adaptation to a situation, helps the students and teachers to stimulate their mind, withdraw from the common stereotypes of response and behavior and choose the specific behavior strategy (Levshenko et al., 2003).

The process of counselling may be performed both individually and in a group and consists of a few stages: the initial stage (establishing the contact, suggesting the attitude for cooperation, removal of psychological tension); the data collection stage (identification of the issue causing concerns, conversation of a counsellor with students (or teachers) for the purpose of determining the context of the issue being analyzed, obtaining information about the person being consulted); the discussion stage (the desired result, the 'image of the desired future' is discussed); the exposure stage (different alternatives of the problem solution are worked out jointly, recommendations and advice are provided); the final stage (further actions of students (teachers) are specified; a total of the meeting is struck, the key aspects of the counselling process are emphasized, the work performed is summarized, further prospects are specified).

Counseling as the psychological support trend promotes not only to the effective process of the students' readiness for creative-innovative activity but also promotes to effective creative-innovative activity of teachers at school. However, the future teachers underestimate the importance of counseling. In 2014, the researcher of the study performed the ascertaining experiment the objective of which was analysis of the state of readiness of future teachers for creative-innovative activity at school. The experiment suggested the use of the researcher's tools and included questioning of senior students of pedagogical specialties and the
self-ranking method. The experiment involved 525 students from 11 higher educational institutions of the Russian Federation (Kazan, Yelabuga, Samara, Shadrinsk, Makhachkala, Simferopol, Yekaterinburg, Naberezhnye Chelny, Ufa, Glazov). Questioning of the future teachers included the question about the issues a teacher faces by performance of the creative-innovative activity. The most significant among those mentioned were insufficient formation of knowledge about the creative-innovative activity (42.5% of respondents), lack of motivation for performance of the creative-innovative activity (40.3%), lack of counseling assistance (26% of respondents), skeptical attitude of colleagues and the school administration to the creative-innovative activity of a teacher (25.3%), lack of time and self-organization issues (39%), lack of self-confidence (28.6% of students surveyed). According to most of the students surveyed, the absence of the counseling assistance is not a huge obstacle during the process of the creative-innovative activity which speaks of underestimation of capabilities of the professional counseling assistance in solution of difficulties that may arise.

During the process of formation in the future teachers of readiness for the creative-innovative activity psychological barriers may appear that are considered as obstacles affecting the achievement by the students of a certain level of formalness of all its components caused by the personal features of students and peculiarities of situation of the creative-innovative activity. During the process of formation of theoretical component of readiness psychological-cognitive barriers may arise; by formation of practical skills the conative barriers disabling actualization of the skills being formed. Immaturity of the professionally relevant personal qualities and prevalence of negative states results in appearance of the personal level barriers expressed in the barriers of psychological tension (emotional barriers) and communication barriers being the key component of the psycho-corrective work. Barriers hinder further performance of the activity are expressed in the difficulties experienced by transition to the next link of the activity and are accompanied by specific emotional reactions Some researchers (N.V. Kuzmina, A.A. Leontiev, A.E. Markova, V.A. Can-Calik, A.V. Tsukanova, V.V. Ryzhov, L.A. Povaritsina) studying the significance of the difficulties or barriers for educative purposes emphasize the presence of both the negative and positive function of a barrier (Zimnyaya, 2000). The positive function of psychological barriers during the process of formation in the future teachers of readiness for creative-innovative activity consists in stimulation, activation the teachers' and students’ activity by analyzing and overcoming the difficulties, gaining experience (Markova, 1993). The adequate organization and provision of psychological counselling ensures overcoming of difficulties, transformation thereof into the driving force of development.

On the one part, psychological trainings promote to establishment of favorable climate within the created interaction system, emancipation of a person and fulfillment of its potential, openness of participants of the process of formation in the future teachers of readiness for creative-innovative activity to each other and perception of everything new, adequate organization of reflection. On the other part, psychological trainings may constitute the components of the process of formation in the future teachers of readiness for creative-innovative activity. Being an independent form of organization of interaction and work with students, trainings ensure formation in the students of pedagogical specialties of the components of readiness for the creative-innovative activity and psychological new formations preceding and predetermining it: trainings of creative thinking, personal development, professional self-determination, motivational orientation of a person, achievement motivation, time management, etc.

As the result of the process of formation in the future teachers of readiness for creative-innovative activity the efficiency of which is increased due to implementation of all mentioned directions of psychological support, the creative-innovative competence is formed in students that under modern conditions is integrated in the teacher's professional competence.

Identification of structural components of the creative-innovative competence of a teacher is possible upon analysis of the fundamental competences: innovative, creative, professional create professionally creative and professional competence of a teacher (Antonova, 2001; Kuzmina, 1990). Besides, considering that creative-innovative activity as a kind of pedagogical activity the conclusion may be drawn that the creative-innovative activity incorporates all components of the pedagogical activity. On this basis we distinguish the following components of the creative-innovative activity of a teacher: the motivational-value, cognitive, creative, operational and reflexive ones.

The motivational-value component is related to striving of a person for organization and performance of the creative-innovative activity, perception of the necessity of improvement of the educational process. The creative-innovative competence of a teacher is inextricably associated with the perception by a personality of the necessity of self-education,
self-development and achievement of the high level of creative self-fulfillment in the professional activity. The formed motivation to the creative-innovative activity promotes to formation of the value-based attitude to the creative-innovative activity.

The cognitive component suggests knowledge of the essence, structure and content of the creative-innovative activity, mastering the methodology of pedagogical research and pedagogical creativity, knowledge of the main stages of the creative pedagogical activity. The operational component includes the set of formed skills in planning and performance of the creative-innovative activity, development of programs, making decisions relating to management of the creative-innovative cycles, organization and self-discipline, etc.

The reflexive component is related to the reflexive position of a pedagogue with the adequate criticism and self-examination as an actor of the creative-innovative activity and implies recognition of the own strong and weak points. The critical analysis of the results of the work performed promotes to improvement of organization and outlining the specific trends of the corrective activity. The reflexive component of the creative-innovative competence also includes the ability to compare the goal set with the obtained result and match the forms, methods and techniques to the goal set.

The creative component represents the level of creativity in the creative-innovative activity performed by a pedagogue. It includes striving for searching the new methods of performing the pedagogical activity, focus on implementation of the creative approach to the pedagogical activity, considering the object of activity from a new perspective, sensitivity to anything new, knowledge of the kinds of pedagogical creativity, non-conventional approach to organization of the own activity, creative approach to solution of any professional tasks, creative thinking, ability to generate original ideas.

The creative component is one of the essential components of the creative-innovative competence of a pedagogue and is expressed in the creative competence. It shall be noted that by distinguishing the creative competence we take as the basis the idea of Bryakova (2009) that the creative competence represents the ability of a personality to act effectively and creatively and actualize the knowledge in the uncertain situation in order to solve the creative tasks.

Since, any kind of the productive pedagogical activity implies the readiness of a pedagogue for creativity it constitutes the essential basis of any of them. In this case, in order to estimate the readiness of teachers for creative self-fulfillment in the professional activity the formedness of creative qualities shall also be taken into account.

From the perspective of psychology the term 'readiness of future teachers for creative-innovative activity' is explained through characteristics of qualities of a creative personality and creative abilities. The following are referred by the researchers (A.L. Yakovleva, R.G. Efendiyeva, N.F. Vishnyakova) to the qualities of a creative individual: thirst for creation, strong will, trust in devotion, emotiveness, the unity of feelings, intelligence and will, creative (divergent) thinking, originality, curiosity, imagination, intuition, empathy, sense of humor, creative attitude to profession. Besides, the personal qualities are distinguished that form significant relations with creativity: determination, tolerance to uncertainty, openness to new experience, appetite for risk, psychotism (Lubart et al., 2009).

RESULTS AND DISCUSSION

Empirical data: In 2013 the members of the scientific research laboratory of innovative pedagogical activity at the Yelabuga Institute of the Kazan Federal University headed by the professor of pedagogical N.N. Savina performed the ascertaining experiment aimed at estimating the levels of formedness in the school teachers of readiness for the innovative activity. The experiment included questioning and the self-rating method. The content of the questionnaire and the self-rating list were developed at the laboratory. We have polled 562 school teachers employed in different regions of the Russian Federation.

During the process of questioning the teachers were proposed to grade the professional-personal qualities promoting to the successful activity of a modern teacher. The list of the profession-personal qualities proposed by the questionnaire authors included 19 items. Based on the results of grading creativity as integral manifestation of creative qualities of a personality appeared at the 8th position (Table 1).

Given that a few decades ago such quality as creativity was not perceived by teachers as obligatory for successful professional activity such results speak of the cardinal change of the teachers' attitude to their professional activity. However, by the critical analysis of the essence of creative activity and with account of its creative nature it appears to be obvious that creativity predetermines the creative nature of innovative activity and makes it possible which means that the importance of creativity for innovative activity is being currently underestimated by teachers.

<table>
<thead>
<tr>
<th>Quality</th>
<th>Rank</th>
<th>Mean value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competency</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>Openness to anything new</td>
<td>2</td>
<td>5.3</td>
</tr>
<tr>
<td>Need for self-development</td>
<td>3</td>
<td>5.5</td>
</tr>
<tr>
<td>Readiness for highly intellectual pedagogical activity</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Working efficiency</td>
<td>5</td>
<td>7.1</td>
</tr>
<tr>
<td>Innovative sensitivity</td>
<td>6</td>
<td>7.3</td>
</tr>
<tr>
<td>Achievement motivation</td>
<td>7</td>
<td>7.3</td>
</tr>
<tr>
<td>Creativity</td>
<td>8</td>
<td>7.9</td>
</tr>
<tr>
<td>Flexibility and adaptability to changes</td>
<td>9</td>
<td>8.0</td>
</tr>
<tr>
<td>Enthusiasm</td>
<td>10</td>
<td>8.6</td>
</tr>
<tr>
<td>Mobility</td>
<td>11</td>
<td>8.7</td>
</tr>
<tr>
<td>General and scientific horizons</td>
<td>12</td>
<td>8.8</td>
</tr>
<tr>
<td>Optimism</td>
<td>13</td>
<td>9.3</td>
</tr>
<tr>
<td>Adherence to principles and courage to defend the own ideas</td>
<td>14</td>
<td>10.6</td>
</tr>
<tr>
<td>Critical thinking</td>
<td>15</td>
<td>11.3</td>
</tr>
<tr>
<td>Curiosity</td>
<td>16</td>
<td>11.5</td>
</tr>
<tr>
<td>Ability to overcome the inertia of thinking</td>
<td>17</td>
<td>11.9</td>
</tr>
<tr>
<td>Reflexivity</td>
<td>18</td>
<td>12.7</td>
</tr>
<tr>
<td>Resilience for risk</td>
<td>19</td>
<td>12.9</td>
</tr>
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</table>

The self-rating list was designed for estimation of formedness of such components of the innovative competence as: motives, personal qualities, cognitive qualities, gnostic skills, research skills, design skills, creative abilities and competitiveness. The estimation of the level of formedness in the future teachers of readiness for the innovative activity was reduced to estimation of manifestation of separate qualities of each component according to the five-grade scale and calculation of the mean value.

The creative qualities included: developed pedagogical imagination, ingenuity and originality of thinking; ability to produce ideas both individually and within communication with other people; ability to see in the object the new attributes and find application of them; ability for original solution of pedagogical tasks; ability for creation of a new, proprietary educational product.

Based on the results of the experiment the average score of formedness of the teacher’s creative abilities made 3.83 which according to the five-grade scale corresponds to the average level of the teacher readiness for innovative activity and that of innovative competence. The average score of the motivational component equals to 3.96, the personal qualities are rated at 3.78 points, research skills at 3.75 points, gnostic skills 3.75 points; formedness of the cognitive abilities in the sphere of innovative activity is rated by teachers at 3.66 points that of the design skills at 3.61 and competitiveness at 3.44 points. If we compare all the 8 specified components the conclusion may be drawn that the level of the creative abilities within the structure of innovative competence is the second only to the motivational component.

The obtained empirical data shall not be considered as the statement that during the process of organization of preparation of teachers or students of pedagogical specialties for such kind of the productive pedagogical activity as the innovative one only such components as for example, competitiveness or cognitive abilities shall be considered and that the existing level of formedness of creative abilities will be sufficient for the efficient innovative activity. Such a statement would be erroneous as for the efficient innovative activity the achievement of the equally high level of all components of formedness of the teacher’s innovative competence including the creative qualities is required.

The researcher’s instruments of the ascertaining experiment conducted in 2014 by the author of the article also suggested the self-rating list. It was focused on estimation of the level of formedness in the students future teachers of readiness for the creative-innovative activity at school. The students were proposed to evaluate the degree of manifestation of the qualities, skills or abilities necessary for formation of readiness for the creative-innovative activity. For the purpose of estimation of the levels of the future teachers’ readiness for the creative-innovative activity the following criteria were distinguished: motivational-value, cognitive, gnostic, creative, operational-pragmatic, emotional-volitive and evaluative-reflexive. The students assessed the indices by each criterion according to the five-grade scale depending on the degree of manifestation of one or another indicator. The levels of formedness were determined within the specified ranges from the low to high level.

The results of the study show that the average value of readiness of future teachers for the creative-innovative activity makes 3.8 according to the five-grade scale which corresponds to the level above the average. At the same time, the level of the creative criterion is average: 3.4 points of the mean value according to the five-grade scale. Upon the high level of manifestation of the motivational-pragmatic criterion (4.6 points) the level of formedness of the operational-pragmatic criterion may be defined as the average (3 points). The average score of manifestation of the cognitive and gnostic criterion is equal and makes 4.3. The emotional-volitive and reflexive criteria differ by 0.2 points: 3.5 and 3.3 points, respectively.

**CONCLUSION**

The obtained data show that the senior students of pedagogical specialties realize the necessity of the transforming activity and positively evaluate the creative-innovative activity. The future teachers have sufficient knowledge of the essence of the creative-innovative activity, its objectives, tasks, methods and techniques as well as certain set of gnostic abilities.
However, the average level of manifestation of the creative potential, formedness of abilities and skills of performance of the creative-innovative activity, preparedness in terms of the emotional state as well as the average level of manifestation of the reflexive position makes, it impossible to organize the effective creative-innovative activity at school.

The performed studies and their results substantiate the necessity of the further study of conditions and peculiarities of formation in the future teachers of readiness for creative-innovative activity, estimation of the level of formedness of creative qualities and determination of the content of psychological support for formation of the creative-innovative competence of a pedagogue. Besides, the obtained empirical data actualize the issue of the creative self-fulfillment of teachers in the professional pedagogical activity.

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REFERENCES


