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Developing creative potential of future teachers: research and results

A.E. Berikkhanova^a, Zh.A. Zhussupova^b, G.Ye. Berikkhanova^{c*}

^aCandidate of Pedagogic Sciences, Assistant Professor, Associated Professor, Kazakh National University of Pedagogy named after Abai, Almaty, 050010, Republic of Kazakhstan

^bCandidate of Pedagogic Sciences, Head of Pedagogy Department, Aktobe Regional State University named after K. Zhubanov, Aktobe, 030000, Republic of Kazakhstan

^cDoctor of Physics and Mathematics, Dean for Faculty of Physics and Mathematics, State University named after Shakarim, Semei, 071412, Republic of Kazakhstan

Abstract

The total globalization and integration of national education into global educational space requires a higher quality of vocational training of future teachers whose competence and creative activeness significantly affects the level of intellectual potential of society. The relevance of this issue becomes more important given the tendency of decrease in students' motivation to learn, to acquire basic academic school knowledge. This makes it necessary to find innovational approaches in educating of future teachers during the process of vocational training.

One of these approaches employs a purposeful development of creative potential among future teachers through introduction of innovational interactive educative methods into the training process which would encourage maximal development of their self-actualization, self-realization and self-improvement. This article gives consideration to the main results in experimental work on purposeful maturation of preparedness of future teachers to creative pedagogical work in university.

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1. Introduction

Bearing in mind the globalization and integration of national education into global educational space, a strategic direction of development of the Republic of Kazakhstan becomes the enhancement of the role of higher education in

* Corresponding author. Tel.: +7-707-807-1521.
E-mail address: brr.aiman@gmail.com

development of intellectual potential of society. Those are institutes of higher education that called on to provide the society with qualified, competent specialists and pedagogical personnel.

Paying a great attention to the role of university in training of teaching employees, P.I. Kartashov notes that university accumulates contemporary psychological and pedagogical knowledge, and allows scientifically comprehend an advanced expertise in pedagogy. Thus it is university that should provide with self-educational skills, should develop needs in constant self-improvement of pedagogical excellence, an ability to assess one's activity in scientific terms, to envisage the results of one's work and follow up with contemporary level of scientific elaborations that influence the formation of students' personalities (Kartashov, 1984). The efficiency of work of modern teacher depends on his/her creative talent which could be applied to encourage a high motivation to learn.

We should note that essentially the profession of teacher is of creative nature by itself because the object of pedagogue's activity is an integral pedagogic process focused on a group of original personalities each one of those having individual temper and unique path of development. Continued change of group members, variability of children mentality and of their psychological and emotional state, diversity and unpredictability of interpersonal relations during educational process require teacher to possess occupational mobility, flexibility and creativity.

What is creativity and what is specific about a creative act? Let's consider the notion 'creativity' in philosophical terms relying on the concept of N.A. Berdyaev (famous philosopher). He considers a personality itself is a 'creative act'. He wrote, 'Creative act is always liberation and surpassing. It involves an experience of effort' (Berdyaev, 1994). In psychological terms 'creativity' is described as an activity which results in creation of new material and spiritual values (Concise Dictionary of Psychology, 1985). Creativity of a teacher lies in the ability to reveal new virtues in child's personality, to elaborate new methods for creative self-fulfillment in students.

We consider the notion 'creative potential' as an intrinsic source of person's qualities that define the limits of his/her capabilities. Thus the creative potential of a teacher comprises a set of psychological personal qualities conducive to a successful pedagogic activity.

Psychological and pedagogic approach to interpretation of person's creative activity and the idea of development of teachers' creative abilities were studied by many scientists of pedagogy and psychology, among them are B.G. Ananiyev (2001), S.L. Rubinstein (2005), V.A. Kan-Kalik (1990), and others.

In our research we were particularly interested in idea of S.L. Rubinstein who claims, 'When a person is making changes of the world around he/she is being changed oneself. Thus, a person changes oneself by implementing a creative activity'. A creative nature of pedagogic activity is deeply analyzed by V.A. Kan-Kalik and N.D. Nikandrov (1990) who interpret pedagogic activity as a creative process which involves both educative activity of a teacher and pedagogic communication.

Despite the fact that psychological and pedagogic science has accumulated a large bank of knowledge on the theory of creativity, there still is an incompletely solved issue of projecting the theoretical insights on a real process of vocational training of future teachers which would provide them both with theory and practical skills to apply it at work.

It is peculiar to the creative activity of a teacher that his/her individuality, mannerism and uniqueness are being displayed. According to L.A. Zakharchuk, the creative activity of a teacher manifests itself by such indicators as a creative initiative, an ability to extensively apply one's knowledge and skills in professional activity, an originality and modernity of pedagogic solutions, a creative improvisation and an aspiration to fulfill creative demands and spiritual needs (Zakharchuk, 2007).

A special attention in development of creative potential of future teachers should be paid to considerate comprehension of teaching subject and skillful management of academic activity of students as well as encouragement of their motivation to learn. The process involves orientation of students in the ways of achieving successful results and developing skills of self-actualization and self-realization. An aspiration to succeed professionally is an intensive stimulus for students to cultivate their abilities, to conduct their self-fulfillment and self-improvement effectively; hence unsuccessful efforts could lead to unproductive activity (Berikkhanova, 2013). A theoretical analysis of problem of the development of creative potential among future teachers has led us to a conclusion that a successful academic activity of students depends on a teacher's creative activity rate. This idea was subjected to be proven in experimental work.

2. Present research

In this research we want to provide a brief description of the experiment devoted to the development of the creative potential of future teachers through the introduction of interactive teaching methods into the educational process during vocational training.

The objective of the experiment is to show the dependence of the success of the activities of the future teacher on the degree of readiness for creative pedagogic activity. At the same time we tried to solve the following tasks:

- To identify the main components of readiness of the future teachers to creative pedagogic activity
- To analyze the impact of interactive teaching methods on change of the components of readiness and on development of the creative potential of future teachers
- To describe the process of positive dynamics of development of creative potential of future teachers in accordance with the stages of the research

Studying the psychological features of the theory of readiness and applying this theory with respect to the subject of our research, we built a theoretical model of readiness of the future teachers for creative pedagogic activities, which consists of the following four components: motivational, informative, procedural and evaluative, each of which has its own indicators.

Motivational component of readiness of the future teachers for creative activity includes such indicators as a student's desire to achieve success in pedagogic activities, an aspiration to creativity, to self-expression, to the search and creation of new educative methods and technologies.

Informative component is represented by such indicators as knowledge of the theoretical basis of the phenomenon of creativity, an understanding of the principles and stages of creative activity, peculiarities of creative thinking and the need for creative potential to work efficiently with students.

Procedural component is associated with the ability of the students to realize the creative approach to work with children, to find and implement their own teaching practice in the creative projects, to participate in various academic competitions and contests, to solve problem situations, to invent new methods and techniques of teaching.

Evaluative component is associated with student's reflexive skills, evaluation and peer assessment of performance, with analysis and synthesis of students' achievements, an ability to compare the achieved levels of creative work with the planned ones.

We selected two groups of students for the experimental work: the control group and the experimental group. In the experimental group at all stages of the research (preliminary, forming and final) there were introduced special interactive teaching methods aimed at revealing the students' creative potential. In this group, unlike the control group, there were actively implemented interactive teaching methods such as organization of competitions, conducting a pedagogic relay-race, the competition of pedagogical projects of the future teachers, holding educational competitions, the use of technologies for self-realization, self-training, solving of pedagogical problems, essay competition on relevant topics of study, the use of critical thinking strategies among students, etc., that effectively influence their emotional and volitional experience and provide incentives for creativity.

After each stage, the students of the experimental and the control groups were tested and the results were summarized in comparison tables. The most important thing in the development of creative abilities of students of the experimental group was the creation of the necessary conditions to reveal their abilities. The students of the experimental group on the basis of the leading provisions of personality-oriented, activity, acmeological and axiological approaches not only acquainted with the structure, principles and stages of creative activity, but also directly involved in the process of pedagogical creativity.

This approach to the study significantly increased the interest of students to develop their creative abilities, had a positive impact both on personal and professional development of students. Thus, in the course of the research we did the emphasis on involvement of each student of the experimental group into creative activity, into seeking a solution to pedagogic tasks.

Considering the pedagogical creativity as a type of activity we stuck to ideas of P.Ya.Galperin (1976) and other scholars who have made great contributions to the study of the theory of activity, the psychology of thinking and theory of the gradual formation of mental actions. Therefore, the creative activity of future teachers was considered as a systematic structure of the logical sequence of the following components: objective of activity - motive of activity - means of activities – operations of activity – results of activity – assessment of activity.

According to this sequence, the students made creative approaches to goal setting, tried to find several options for individual and group motivation of students engaged in the search for new means and methods of training and education, defined and specified the necessary operations and actions of creative work with children, predicted the expected results of the activity and based on reflexive technology made evaluations and peer assessment of the results achieved.

The effective mechanism for the development of the creative potential of students of the experimental group was phased diagnosis of readiness levels of future teachers for creative activities. A set of techniques were applied such as tests ‘How far is your creative individuality formed?’, ‘Your creative potential’, ‘Are you a creative person?’, completion of drawing tests, essay writing and others. A systematic monitoring of positive dynamics of molding readiness was carried out. We followed the conceptual ideas of preparing students for creative activities outlined in the book of P.I.Pidkasistiy and N.A.Vorobyova (2007) in carrying out such procedures.

The monitoring has shown that the majority of students in the first stage increased a desire to unleash their creativity, i.e. the motivational component of readiness being formed in more than 50% of students was at the sufficient and high level. However, informative and procedural components of many of them were at the average level, which indicates a lack of knowledge and skills to develop creative abilities. This fact confirmed the relevance of the implementation of innovative educational technologies in the process of achieving the objective of the experiment. Here students were familiarized with the essence and characteristics of various technologies of training and education such as a technology of problem-based teaching, reflexive technology, technology of development of critical thinking, where the underlying technology is considered the integral pedagogical process (Khmel, 2002). Getting to know the essence of each new teaching technology the students tried to project this knowledge for their teaching purposes, created lesson scenarios of teaching subjects.

It is the projection of known training and educative technology on a particular subject, on a specific topic, for a specific school age has made it possible for students to express individual creative abilities. With the help of similar creative tasks, each student happened to be in the role of director of the lesson when it was necessary to present their own project, their own lesson plan on the selected topic, to implement their own ideas to achieve success.

The number of students of high and adequate levels of readiness for creative activity was rising with the transition from one stage of the experiment to the next. This positive dynamics was particularly distinctive during the pedagogic traineeship of students in schools. Direct professional communication with students and the real conditions of school increased students’ creative activity and the extent of their research results. Pedagogical practice showed that the students of the experimental group maximally tried to realize themselves as a creative teacher. It was pleasant to hear the responses of students’ optimistic answers to the question, ‘What is most influenced the development of your creative potential?’ 87% of respondents answered, ‘The desire to help children’, ‘Joy of self-realization’, ‘Confidence in the success’, etc.

At the final stage of the experiment we carried out a detailed analysis and mathematical processing of the results of the students of the experimental group.

As demonstrated by analysis of the results of the research, the students of the experimental group increased motivation to master the teaching profession and showed growing interest in the management of educational and cognitive activity of students. In the final survey nearly 89% of respondents image themselves as successful professionals in the future pedagogical activity, because they gained confidence in their abilities, and formed a sufficient high level of readiness for creative teaching.

Comparative data for all components and indicators show positive dynamical growth of indicators of motivational, informative, procedural and evaluative components of readiness of students to creative teaching. So a high level of readiness in the experimental group reached 15.5%, meanwhile in the control group the figure is 5.8%, which is about 3 times lower than in the experimental group. Similarly, a sufficient level of students’ readiness in the experimental group was 41.1%, whereas in the control group this level is reached only by 23.1% of the students.

Statistical data confirmed our theoretical assumption that the more intensively teachers use interactive teaching methods, the more actively students develop their creative potential.

This research demonstrates that there are opportunities in a professional education that not all teachers use to improve the training quality of future teachers. One of the opportunities concerns the introduction of interactive teaching methods in the educational process of the university. A student with a high level of readiness for creative teaching activities is always sensitive to the psychological atmosphere of interaction with students, expresses empathy, can quickly change tactics of teaching and improve the motivation for learning in today's students.

3. Conclusion

In this research the development of the creative potential of students enhanced their motivation to master common psychological and pedagogical knowledge, in-depth study of the teaching subject and competent teacher interaction with students.

The development of creative potential is the key to a successful career of students and their professional socialization on the competitive labor market.

The approach to the revelation of creative abilities of future teachers involves the rejection of established patterns and stereotypical behavior techniques, and requires the application of innovation, creativity and ingenuity of a teacher.

The prospect of this research may be associated with the development of guidelines for teachers of other departments, implementation of methodological seminars on advantages of interactive methods of teaching of students, with pedagogical prediction and psycho-pedagogical encouragement of personal growth of students, teaching management, diagnostics of students' success, monitoring students' achievements, etc.

To ensure that students are continuously working on their self-improvement they are recommended to open their individual creative laboratory, a bulk of creative ideas for further enhancement of their creative abilities. When a student has laid a solid foundation for the development of creative abilities, there is no doubt that he/she in all situations is able to distinguish oneself by creativity and originality of thought.

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