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The Creative Competence of Future Teachers in Information-Educational Environment of University

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Abstract

The relevance of the presented paper is related to the problem of creative competence formation in Information-Educational Environment of university. The “modern” teacher's personality is formed in a period of rapidly changing information-technological conditions of professional reality in school. The goals of education are changing very quickly, and teacher preparation programs depend on demand for the modern educational era. Russian and foreign practice of Information-Educational Environment of university development shows the tendency to growing ability in teacher training in quickly solving non-standard tasks in teacher education. The components of IEE of university provides the result of linking between previously learned and new patterns of teaching and learning activities, thus, creative competence in teachers is readiness to see real-life problems and to solve them in classroom by means of IEE. This issue presents the necessity of practical approach of IEE methods and tools implementation in activation the progressive creative self-development in future teacher. Creative competence in future teachers involves working in new conditions. Consequently, the modern IEE resources give the best opportunities to the ability for flexibly adjustment to the requirements of the educational system.

Keywords: creative competence, information-educational environment, teacher training, future teachers training, educational environment of university

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Introduction

Problem statement of Creative competence study. At the present stage of studies development in education, we see (as educators), that there is really a requirement to apply modern approaches and methods in the field of teacher preparing. New methods and approaches make practical implementation of creative possibilities in future teachers wider. The organization of teacher training requires the professional's personality accession in practice-oriented direction of educational activity. One of the most complicated problem is dualism of the educational system practice in teacher training: new approaches and technologies has to be included in teacher training in universities and teacher work is based on the old ones methods while they (teachers) are required by new functions (research, diagnostic, correction and development in frames of basics of innovation, design, communication, reflexive, and management activities) (Shamova, Tretyakov, & Kapustin, 2002).

Creative training of future personnel in the area of education implies the ability to carry out and produce their professional activities with the strengthening in the content of methods and forms, which are presented in practical work of teaching. "The formation of the creative personality of the teacher" is highlighted among the areas of education, in which the starting point of teacher training is the process of improving talent. Creativity and initiative as characteristics represent the most crucial source in socio-economic growth (Verbitsky, 2016).

Problem statement of Information-Educational Environment of University study. The digitalization and informatization prerequisites of the educational environment of university are highly important due to the process of modernization in a system of teacher education. Currently, future teachers are required not only to have a degree in education, but also they have to show a creative style of successful learning in accommodation with successful practicing in teaching. In this context, the "modern" teacher's personality is formed in a period of rapidly changing information-technological conditions of professional reality in school.

The rising of competence level and the growing of knowledge and new skills in future teachers improve the methods and technologies of teaching, which are implemented in school. The goals of education are changing very quickly, and teacher preparation programs depend on demand for the modern educational era.

The total precise understanding of content and implementation of Information-Educational Environment in university (IEE) facilitate sustainability in development of following professional competencies: "informational, educational, social, pedagogical, functional and methodological, diagnostic, creative,

research, prognostic” and so on. Therefore, this informational content supports educators in university to activate the progressive creative self-development in future teacher (Sharifzyanova, Shtreter, & Nauryzbayeva, 2015).

Directly, these demands have a significant influence on the education system. The teacher's effectiveness in school practice is related to the functioning of the education system (Selvi, 2010), that is, with the training of teachers during their learning in university.

Modern technological base determines both the formation and development of creative competence of teacher by the new approaches, models, methods and tools that support to the creative training of teachers (Eliseeva et.al, 2016) in the Information-Educational Environment (IEE) of university.

Purpose and objectives of the study

The main aim of this study is to define the content of the Information-Educational Environment that contributes to opening and increasing the creative competence in future teachers.

Methodology

Theoretical analysis of existing study results on the problem of determining the content of the Information-Educational Environment of university that promotes the formation of creative competence in future teachers. This study presents theoretical conclusions to the point of Russian and foreign involvement on the necessity of implementation of content of the IEE in modern conditions of teacher training education in university. Particularly, the main interest is based on the idea of discovered scopes, which provide creative competence formation in future teachers by means of great variety of techniques and tools in the Information-Educational Environment of university.

Results

Creativity and creative competence. The main question of understanding of creative competence in teachers is still correlates with concept of personal creativity. A literature review of creativity repeatedly involves some indicators of this characteristic actualization (Guilford, 1968; Torrance, 1977; Sternberg, 1999):

- 1) Problem searching and solving style of thinking;
- 2) Specific personality features (curiosity, flexibility, enthusiasm, novelty);
- 3) Readiness for risk in activity etc.

According to wider comprehension of term “creativity”, we should notice that modern meaning includes and mixes different points of view. The idea of being creative means to “do or become something fresh and valuable with respect to others as well as ourselves” (Pope, 2005). Creativity is considered as the creative potential (abilities) of a person that can be manifested in thinking, communication and some other types of activities. Creativity typifies personality as a “whole person” or the compound of individual parts, products of activity in person and the process of their creation (Khakimzyanov & Puchkova, 2019).

In general, as personal characteristic creativity involves producing novel and valuable ideas, concepts and material results or products of activities (Sternberg, 2006). Creativity is seen as a unusual or unique ability that presents a little “extra” in only surefire way of doing things (Deuze, 2019). Thus, the creativity is close to the meaning of innovation personality potential.

Consequently, we can conclude that creativity is relatively stable personal characteristic. In educational paradigm, creativity adds some dynamic features and this meaning includes “special approach to both “creative” teaching and also “creative” learning strategies”, also the active nature of creativity in educational practice shows that “creativity-oriented teaching and learning is highly effective” (Cropley, 2011).

According to Epstein, “creative competence” should be found in “the readiness to adaptively and independently use the acquired knowledge”. Person can supplement the knowledge system and strive for self-improvement. Creative competence includes four core competencies of creative self-expression (Epstein et.al, 2012-2013), so we can define these competences in teacher personality:

1. “Broadens Knowledge and Skills”: (teacher conscious attends to new knowledge and professional skills outside of one’s experience).
2. “Captures New Ideas”: (teacher inspiration is based on different novel ideas “as they occur, without first judging or editing them”).
3. “Manages Surroundings”: (teacher inspiration depends on social communication in a positive way; teacher strives for novel and fresh ideas in social environmental atmosphere).
4. “Seeks Challenges”: (teacher is ready for challenges and accomplishes failure beneficially).

The presence of creative competence has a driving force for the searching activity and implementation the innovative approaches in educational process. Teachers with advanced creative competence develop professional competencies in general. The process of creative competence forming in future specialists is

possible if we have creating conditions for students in training "step-by-step passing of reproductive, activating, integrative, creative stages" (Timofeeva, 2012). In addition, it was noted that transformation of personality starts with productive activity as well as essential scientific aim of education now is to study personality with the practice of creative potential training of future teachers (Popov, Ustin, Ibragimova, & Stepashkina, 2018).

Thus, it is impossible to prepare personnel that could become competitive and successful in classroom without the adding of a creative component in the work process of teacher. Therefore, training courses directed at the formation or development of creative competence should be included as obligatory in the educational programs for teachers in Higher Education Institutions, as well as in the programs of professional development of teachers (Vodyah, 2012).

Based on the above, person on the one hand has creativity as specific individual feature. In addition, this characteristic represents in low or high level. However, creative competence is the ability to activate this feature in professional activity despite of its level. Future teachers are able to learn how to perform their activities creatively, and they need to be equipped with various skills for forming both level of creativity in general and creative competence in particular.

Information-educational environment and creative competence. Information-Educational Environment of university supports teacher training by means of "a lot of information objects and connections between them; means and technologies for collecting, storing, transmitting (broadcasting), processing, producing and disseminating information, knowledge, a means of reproducing audiovisual information; organizational and legal structures supporting information processes" (Levina et.al, 2017).

Information-educational environment (IEE) allows educators to organize and support training in pedagogical system, i.e. the material and technical, the financial and economic, the regulatory and management potential opportunities of Information-educational environment ensure the development of learning and creativity (Zakharova, 2003, 2013).

Technologically, the organization of creative competence development includes the following forms, methods and training tools:

- special seminars, workshops, trainings;
- traditional methods;

- innovative education methods for intensification the level of creative knowledge;
- problem solving methods, considered an improvement of the level of motivational focus on pedagogical creativity;
- creative methods, aimed at stimulating personal involvement in the creative pedagogical process: workshop and training;
- textbooks, folios, multimedia training programs, didactic materials (Tutolmin, 2012).

Thereafter, a specially organized environment is required in order to “construct” creativity as a personal and behavioral feature. The process of development creative competence in students' requires the selection of special tasks in addition to realization modern tools in IEE. The Information-Educational Environment in university fully provides qualities for the formation of creative competence. Nowadays atmosphere of cooperation between future teachers, between students and educators is based on stimulating the curiosity of the student, encouraging the expression of original ideas, a personal example of a educator in using a creative approach to solving problems by means of IEE (Zakharova, 2003, 2013).

A modern specialist in different professional spheres should be able to identify and implement the essential resources of information to solve professional problems (Safiullin, Gafurov, Safiullin, & Odintsova, 2014). Information-educational environment as a replaced educational process has the specific educational function – “at the request of users in order to maximize the use of information” (Levina et.al, 2017).

According to the definition of Bentley (2001), human creativity involves numerous knowledge and skills in the implementation of innovative ways to achieve an important goal. Respectively, modern informational tools and resources allow all providers in university to create special space for novelty of learning process.

Creativity in future teacher includes the presence Information-Educational Environment that activates creative learning. Thus, creativity contributes to the development of classical education with imagination and new experience though the solving pedagogical tasks (Craft, 2005).

Samples of creative activity and its results are directly available in the educational environment of university also by Internet possibilities. These are materials from electronic conferences, virtual seminars and forums, periodical scientific electronic publications, Web sites of scientific centers, distance competitions, virtual research laboratories. A special place among the samples of creative activity is occupied by the materials presented at the second and third levels of the IEE implementation in university: in specialized IEE for lecturers and educators and in individual IEE for students (Zakharova, 2003-2013).

Web-technologies greatly increase the availability of new sources of knowledge and allow us to support the organization of new types of educational activities (Maslov, 2015).

Teaching and learning in modern IEE of university has a number of advantages (Khairova & Toktarova, 2016):

- wholeness of academic subject perception and content, visualization;
- integration with e-learning, including work in team and high quality of feedback;
- different range of forms and formats of teaching and learning materials formats depending on student's preference (text, video content or audio lectures, etc.);
- presentation of knowledge, materials, projects by means of IEE;
- time-saving.

Information resources facilitate the educational programs with high level of training and qualitatively new content. The Information-Educational Environment of university provides additional opportunities for the development of both individual and collective creativity, and accomplishes all opportunities for creative development of the professional personality (Safiullin, Gafurov, Safiullin, & Odintsova, 2014).

Conclusion

Russian and foreign practice of Information-Educational Environment of university development shows the tendency to growing ability in teacher training in quickly solving non-standard tasks in teacher education. Creative ability expands knowledge and forms skills for using a system of different representations from variety areas of life. The components of IEE of university provides the result of linking between previously learned and new patterns of teaching and learning activities, thus, creative competence in teachers is readiness to see real-life problems and to solve them in classroom by means of IEE. However, the review of psychological and pedagogical theories and studies about creative competence correlation with IEE in university allows us to assert the lack of special investigations on the problem of creative teacher training.

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