ISSN: 0798-1015

REVISTA ESPACIOS

Educación • Education • Educação • Vol. 41 (33) 2020 • Art. 14

Recibido/Received: 24/06/2020 • **Aprobado**/Approved: 14/08/2020 • **Publicado**/Published: 03/09/2020

The content analysis of the professional competence formation problem in the higher education theory and practice

El análisis de contenidos del problema de formación de competencia profesional en la teoría y práctica de educación superior

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Abstract
The article reveals the results of content analysis of opinions of various scientists about the value of a competence-based approach to training modern specialists in various fields and experimental work based on this analysis. The authors emphasize the need for the formation of "new" competencies in the process of higher education, which consist in the ability of students to be able to live in modern conditions.
key words: higher education; professional competence

Resumen
El artículo revela los resultados de un análisis de contenido de las opiniones de varios científicos sobre el valor de un enfoque competente para capacitar a especialistas modernos en diversos campos y un trabajo experimental basado en este análisis. Los autores enfatizan la necesidad de formar" nuevas " competencias en el proceso de educación superior, que consisten en la capacidad de los estudiantes para vivir en entornos modernos.
Palabras clave: educación superior; competencia profesional

1. Introduction

According to the “Educational Law” at all Russian educational levels, educational standards introduction, providing a competence-based approach, the fundamental knowledge and practical skills relationship is

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supposed. The competence approach, as the educational standards new generation methodological basis, creates conditions for more effective professional and education quality management and providing professional training for the labor market needs. This approach implies the learning goals formulation through the competencies that a modern employee professional activity demands (A. L. Andreev, 2005; Y. V. Vardanyan, 1999; A. A. Verbitsky, 2009; V. A. Dalinger, 2005; O. L. Zhuk, 2008; E. Zeer, E. Symanyuk, 2005; I. A. Zimnaya, 2003; Knowledge and competence paradigms: continuity or revolution in the philosophy of education? Materials for scientific discussion, 2006; D. A. Ivanov, 2007; A. Kasprzak, 2002; I. M. Polivoda, 2005).

It is necessary to reveal the competence approach essence in higher professional education for the competence approach realization to teacher training according to the new educational paradigm. The international Commission on education in the twenty first century made a conclusion that the mankind future progress depends not only on economic growth, but also on the personal development level. Based on the mastering only narrow professional knowledge, skills and abilities lack and the need to expand the training content with a wide range of knowledge reflecting the modern world picture, UNESCO offered to move to the “human competence” concept. The specialists consider high level of knowledge and information awareness as one of the primary conditions in forming labor market process. The changed social, political and economic life conditions put forward new requirements to the graduates of the educational institution: the competence presence, professionalism, competitiveness, the performed activity personal attitude, constant education process, creative skills and professional skills mastering.

A developing society needs modern educated, moral, entrepreneurial people who can be responsible in a choice situation, predicting their possible consequences, who are able to cooperate, be mobile, dynamic and constructive and have a developed sense of responsibility for the country and the world future. Higher education plays a great role in the identified social needs realization, the aim of which lies in the profession foundation, forming the specialist mentality, expanding future teachers’ professional opportunities, developing creative abilities, ensuring professional mobility and competitiveness.

2. Methodology

The methodological basis of professional competence formation in higher education theory and research for practice problems are: the doctrines of universal connection and phenomena interdependence, the general, special, individual, objective and subjective, logical and emotional unity; the continuing education concept; the professional education didactic concept; activity and contextual approaches to the study as a system, designing and modeling University educational space. Along with general scientific methods (comparison, analogy, analysis, synthesis, abstraction, generalization, systematization and induction), with methods of theoretical analysis (historic and geographic and comparative methods, modeling, design), the study also used empirical methods: the program and methodological documents and legal acts study; the generalization of experience in realizing a competence-based approach to students teaching; diagnostic methods (testing, rating, generalization of independent characteristics, expert assessments, self-assessments); survey methods (questionnaire, interviewing, conversation); observational methods (direct, indirect and included observation); praximetric methods (ascertaining and forming experiment); statistical data processing, cluster analysis methods. Authors’ diagnostic tests were also used: “Ready for professional activity” and “Satisfaction with the learning process at the University”, “Methods for diagnosing the individual motivational structure”, the questionnaire “The identification of the self-development ability”, “Morphological test of life values”, the questionnaire “Communicative and organizational tendencies”, etc.

2.1. Theoretical and methodological views on the specialist competence formation in the higher education theory and practice

The competence approach is introduced as a mechanism and one of the important conceptual provisions for updating the educational content in the educational modern materials. This means a dominant educational paradigm gradual reorientation with the predominant knowledge and skills formation translation for creating conditions for a set of competencies mastering, meaning the graduate potential, ability to survive and live in a modern multifactor social and political, market economic and deep communication space (A. Kasprzak, 2002).

Special attention is paid to the competence approach in the higher education system today (D. A. Ivanov, 2007). This approach idea was born in the early 80s of the last century and was first mentioned in Western psychological and pedagogical literature in the late 1960s – early 1970s, and was found in Russian literature in the late 1980s. In the 60s in the United States, the “competence” concept (then it meant simple practical skills that were formed as a “knowledge automation” result) was first used in the performance-based education context, the aim was to train specialists who could successfully compete in the labor market. The competency considered as a personal category, while competencies became the curriculum units and formed the “anatomy” of the competency. Researchers mainly began to address the specialist professional competence as a pedagogical problem in the 80-90s of the XX century. In the first decade of the new century the competence approach in education as a phenomenon was talked about (V. T. Fomenko, 1996).

There are also pedagogical prerequisites in the competence approach in educational practice and in theory. Practitioners paid attention to the obvious discrepancy between the graduate training level and quality provided by secondary special and higher educational institutions, and the modern specialist requirements long ago. This indicates a gap in professional training, consisting in the system formation of subject knowledge and skills, educational institutions do not pay enough attention to the many personal and social competence development that determine the graduate ability to self-determine and realize themselves in professional activities in new social and economic and social and educational conditions.

Various concepts are known in Russian pedagogy which anticipate the competence approach concept. They include: educational content concepts (focusing on the social experience development , they along with the knowledge, skills and experience include emotionally-valued relations, and the creative activity experience), the problem-based education concept (focused on the thinking skills, creative thinking skills to solve problems development, that means to find a way out of difficult situations); students' personality traits formation concepts, such as independence, communication, desire and ready for self-development, conscientiousness, responsibility, creativity, etc., along with knowledge and skills. However, the ideas contained in these concepts and the ways of their realization did not enter into mass practice, since they were not really in demand by the state, society, and production (V. T. Fomenko, 1996).

The competence approach realization in professional education contributes to the achievement of its main aim – the qualified specialist preparation of the appropriate level and profile, competitive in the labor market, fluent in the profession and oriented in similar activity areas, capable working in the specialty, ready for constant professional education, social and professional mobility. The competence approach is focused on the priority education aims: learning, self-determination, self-actualization, personality socialization and development; who is able to move from the education orientation on the knowledge reproduction to the knowledge application and organization; shift the focus to interdisciplinary integrated requirements for the educational process result; focus human activities on a professional and life situations variety.

The realization of competence approach specificity in high school is in general social and personal importance of education, the clear professional and personal improvement aims and objectives formulation, developing the

criteria system, the psychological and pedagogical support of the emerging personality organization, educational programs individualization and differentiation, the creation of monitoring and due diligence skills practical application conditions for valuable professional experience knowledge and acquisition and development capabilities to improve existing knowledge, skills and methods of activity in the socialization and self-determination process of studying at the University.

The content analysis of scientific sources large number allows us to make a conclusion that historically there have been two different ways of interpreting the relationship between the concepts of “competency” and “competence” and they are either identified or differentiated.

Many scientists think that the concept of “competency” means sufficient work experience, the availability of necessary knowledge (at the application level), a knowledge combination, skills, and ready to work, etc. (Knowledge and competence paradigms: continuity or revolution in the philosophy of education? Materials for scientific discussion, 2006; D. A. Ivanov, 2007; M. Koles, O. N. Oleinikova, A. A. Muraveva, 2009).

Comparing the concepts of “competency” and “competence”, the authors point out the practical orientation of competencies. As part of their differentiation, since the 60s of the last century, the understanding of their differences and the consideration of “competency” as a knowledge based essence, intellectually and determined person social and professional life has been laid down (E. Zeer, E. Symanyuk, 2005).

The competency in professional education modern pedagogy should be considered as a new aim type setting in educational systems, determined by market relations (A. L. Andreev, 2005). What is its novelty, how does this aim type setting differ from the traditional, academic approach to aim formation?

The main difference is that “the competence model gets free from the of the object (subject) dictation of labor, but does not ignore it, thereby placing at the forefront of interdisciplinary, integrated requirements for the educational process result” (V. I. Baidenko, 2002, p.42). A competence based approach means that educational aims are linked more strongly to applicability in the world of work situations. Therefore, competencies “cover the ability, ready of knowledge and attitudes (behaviors) that are necessary for the activities” (V. I. Baidenko, 2002, p.43).

The analysis of all existing specialists’ approaches in the professional education field has shown the different points of view in the professional competency understanding.

According to the first point of view, “professional competency is an integrative concept including three components –knowledge mobility, method variability and critical thinking” (M. A. Choshanov, 1996).

The second approach is to consider professional competency as a three components system: social competency (the ability to group activities and cooperate with other employees); special competency (ready to perform specific activities independently); individual competency (ready for continuous professional development and self-realization in professional work) (E. Zeer, E. Symanyuk, 2005).

The third approach is to define professional competency as a two components combination: professional and technological readiness, which means the possession of technologies, and a component having a supra-professional character, but is necessary for each specialist key competencies (A. M. Novikov, 2010).

“Competency” is defined as a combination of six components in the American specialists’ concept in professional education. They are: conceptual (scientific), that means understanding of the professional activity theoretical foundations; instrumental component is the basic professional skills possession; integrative one has the ability to combine theory and practice in solving professional problems; contextual component is the social and cultural environment understanding, in which professional activity is performed; adaptive component means the ability

to anticipate changes and be prepared for them in advance; communicative one considers the ability to use written and oral means in interpersonal communication effectively.

At the same time, American scientists believe that professional competence is formed only in specialist's relation to social attitudes, they include: professional identity – the adoption of professional standards and responsibilities through the process of professional socialization; professional ethics – the development of the profession ethical standards; competitiveness – the ability to work effectively in the structure of market relations; the desire for scientific growth – the need for new knowledge through research; motivation to continue education – the need to improve professional skills and knowledge in order to be ready for modern requirements.

The competence approach is the most appropriate to the modern society needs, because it focuses on the professional knowledge, skills (which is the main and almost the only thing for the academic approach) formation, and the universal abilities development and students' readiness.

The competence approach is both systemic and interdisciplinary. It is also characterized by personal and activity aspects, it means it has a practical, pragmatic and humanistic orientation. In other words, the competence approach strengthens the educational practical orientation, its pragmatic, subject-professional aspect. In this pragmatic sense, the competence approach cannot be contrasted with the knowledge centered approach, because it only emphasizes the role of experience, skills to practically implement knowledge, and solve problems on this basis. But it is not identical to the knowledge centered approach, since it fixes and establishes the knowledge subordination to skills, focusing on the issue practical side (Knowledge and competence paradigms: continuity or revolution in the philosophy of education? Materials for scientific discussion, 2006).

In the content analysis of the problem stated in this article we identified a number of ideas about the concept of "a future specialist competency", which can be divided into the following clusters:

1. Competence as a professional activity quality: "professionalism", "ability to adapt in professional activities quickly and efficiently", "sense of confidence in professional activities", "belonging to a professional circle", "love for your subject", "knowledge of the business professional activity", "ability to work in any field of your specialty", "professional orientation", "professional thinking", "professional ethics", etc.

2. Competency as a system of knowledge and skills: "knowledge", "ability to work in a team, group", "knowledge in the professional activity field", "business knowledge", "the possession of the own and related subjects", "deep knowledge", "professional activity knowledge bases", "abilities and skills according to Higher education Federal state standards", "professional work skills", "professional training", "theoretical training", "the ability to apply (experience) knowledge in practice", "the ability to manage in social processes", "professional skills (work experience)", "the independent work skills", "practical skills", etc.

3. Competency as a social and psychological quality: "striving for self-improvement, career and professional development", "breadth of views (erudition)", "comprehensiveness", "literacy", 'culture", "mobility", "ethical standards compliance ", "world perception", "value orientations", "academicism', "ability to study, self-education", "enthusiasm", "intelligence', "personal position', 'independence", "spiritual and aesthetic orientation", "practice".

4. Competency as the ability to solve problems: "solving problems (practical, professional, technical), high quality, quick solution", "the ability to set and solve problems" (O. L. Zhuk, 2008).

The competence approach essence cannot be understood without answering the question of what are the grounds for distinguishing and differentiating competence types, which of them are the key ones.

Considering the competencies quantitative composition, first of all, it should be noted that according to the labor market terms glossary, the standards for educational programs and curricula development, there are the following models (methods) for determining competencies:

a) based on personality parameters, it means personal qualities and experience a person possesses: knowledge, education, training and other personal characteristics allowing him to perform the activities effectively;

b) based on the activities objectives;

c) based on performance management (M. Koles, O. N. Oleinikova, A. A. Muraveva, 2009).

Most authors , firstly, identify key competencies as part of the competency. Key competencies are those generalized core competencies providing the person's normal functioning in society. They are based on universal knowledge, skills, and generalized experience of creative activity. Petrov believes that the main basis and the point of orientation for identifying key competencies is the social order involving the current and future state needs, social groups, the professional field, and personal quality requirements. It is the key competencies that determine the competency structure as the education aim and result (A. Petrov, 2005; A. Petrov, 2004).

Here are the key competencies description proposed by A.V. Khutorsky:

- value-semantic competence (worldview, value orientations, self-determination mechanisms in various situations);

- general and cultural competence (knowledge and experience in the national and universal culture field; spiritual and moral life foundations; family, social, general phenomena and traditions cultural foundations; the science and culture role in human life; competencies in the home, cultural and leisure sphere);

- educational and cognitive competence (elements of logical, methodological, general educational activities; aim setting, planning, analysis, reflection, selfassessment; methods for solving educational and cognitive problems; functional literacy);

- communicative competence (languages knowledge, the way to interact with surrounding and remote people and events; working in a group, team skills, various social roles possession);

- social and labor competence (performing a citizen, observer, voter, representative, consumer, buyer, client, manufacturer, family member role);

- personal self-improvement competence (physical, spiritual and intellectual selfdevelopment methods; emotional selfregulation and selfsupport; personal hygiene, personal health care, sexual literacy; internal environmental culture; safe life ways) (A. V. Khutorskoy, 2003).

Whereas competency is a complex personal resource providing an opportunity for effective interaction with the world in a particular area and it depends on the necessary competencies, that is why competency can also be represented as a set of competencies, meaning observing manifestations of productive activity.

In the higher education theory and practice, the following competencies types are distinguished:

- key competencies referring to the general (metasubject) education content;

- general subject competence referring to a specific academic subject and educational fields;

- subject competence being private in relation to the previous two competency levels, having a clear description and the forming possibility within the academic subjects framework.

The basis for their development is: responsibility, independence, tolerance, the dialogue ability, the ability to form and express a critical assessment, self-actualization, self-education, etc.

There are also universal competencies, the presence of which is desirable for specialists in any field. Among them:

- political and social competencies, such as the ability to take responsibility, participate in group decision making, resolve conflicts without violence and participate in maintaining and improving democratic institutions;

- competencies related to multicultural society living, such as accepting differences, respecting other people and being able to live with other cultures, languages, and religions nations;

- competencies related to oral and written communication, more than one language knowledge;

- competencies related to the society informatization, technologies knowledge, application understanding, weak and strong sides, and the ability to make critical judgments regarding information disseminated by mass media and advertising;

- the ability to study throughout life as a basis for continuous learning in the context of both personal and professional and also social life.

Some researchers stand on basic competencies, in addition to some of the above, include: general and scientific (knowledge of the nature, society, and human activity basic laws); social and economic (knowledge of the economics and organizational behavior basics); civil law (civil law norms knowledge); polytechnic (natural science basics of engineering and technology knowledge, the automated production principles, control and management systems); special (general professional knowledge in the field of integral professional activity) competencies.

Within the framework of “The setting up educational structures” project (Trends 2003: Progress towards the European Higher Education Area; Graz Declaration; trends in Learning Structures in European Higher Education III), being the next step in implementing the Bologna Declaration aims, general competencies were divided into three groups: instrumental, interpersonal and systemic.

Instrumental competencies include cognitive abilities, the ability to understand and use ideas and considerations; methodological abilities, the ability to understand and manage the environment, organize time, build decision making strategies; skills related to the technology use, computer skills and information management abilities; linguistic and communication skills. In a concrete form, instrumental competencies are: the ability to analyze and synthesize, to organize and plan, basic general knowledge and profession knowledge, native language communication skills, basic computer skills, information management skills (the ability to extract and analyze information from various sources), the ability to solve problems and make decisions.

Interpersonal competencies include abilities related to the express feelings and attitudes ability, critical thinking and the self-criticism ability; social skills connecting with social interaction and cooperation processes, with the ability to work in groups.

System competencies include: the ability to perceive parts of the whole related to each other and to estimate the each component place in the system, the ability to plan changes improving the system and design new systems.

Based on scientific research by foreign and Russian authors in the Russian Federation National qualifications framework there are four types of competencies: personal competence, which implies behavioral skills in a specific situation; professional (functional) competence (skills and know the way to do): what a person should be able to do in the workplace, in the field of education or social activities; cognitive competence, involving the use of theories and concepts, as well as "hidden" knowledge acquired from experience; social and ethical competence presupposing the certain personal and professional values presence.

In addition, key competencies are taken into a special aspect. Based on the common European realities, they include: the native language communication; the foreign language communication; basic competencies in mathematics, science and technology; digital competence; the ability to study; interpersonal and civic competencies; entrepreneurial and cultural competencies. According to European experts, these competencies should be mastered within the compulsory education and further developed framework in the course of continuing learning (M. Koles, O. N. Oleinikova, A. A. Muraveva, 2009).

An important aspect of the problem is the question of the conditions for implementing the competence approach in the higher education educational process.

In addition to the social order for the creative personality specialist formation, characterized by competency, professionalism, and competitiveness (the condition discussed at the beginning of the paragraph), it is important to think about a competence based approach to the educational content selection. The traditional subject oriented approach to the content selection is characterized by the fact that a subjects list is determined firstly, and then a set of sections and topics is carried out within each specific subject, and finally, within the topic there is the concepts and facts selection. The competence approach requires the planning process for the education content to proceed from the key competencies. Firstly, this approach realization needs to know which key and subject competencies are necessary for training material certain sections, and secondly, to take into account the standard for the level of specialist training requirements. The training content should be based on the following principles: determining the training content, based on the forming an active and creative personality aim, paying attention to the level of abilities development, available experience and needs; personal and activity educational disciplines structuring; meaningful provision of activities target awareness; the comprehensive scientific and professional, subject and complex learning of the specified training content optimal combination provision.

The next condition to the competence approach effective realization is the appropriate educational technologies choice. "The competence approach to the technologies choice means the subject field content should not be taught in object-knowledge, but in an activity-based form. Competency is revealed in the activity and is formed in the activity" (Knowledge and competence paradigms: continuity or revolution in the philosophy of education? Materials for scientific discussion, 2006, p. 26). The activity approach means the educational process organization using various forms of not only educational, but also gaming and work activities, as well as communication, it is oriented to the professional experience acquisition by students.

Summing up the discussion about, it should be said that despite the fact that the higher educational Federal state standards in most specialties of undergraduate and graduate programs are implemented in Russia today, it is necessary for the specialists' further research activities improvement in various fields to define the qualitative and quantitative competencies structure, organizational and pedagogical conditions of the competence approach realization in the higher education practice.

The problem of matching the qualifications of University teachers to the newly developed competence based approach to specialist training is very acute. We are convinced realizing this important condition is difficult because of the pedagogical education lack for a significant part of the higher education institutions teaching staff. The following competencies are assumed for the University teacher: 1) the essence knowledge of the

professional competence forming process, studying the psychological and pedagogical science achievements; 2) the process planning; 3) understanding that the professional competence formation is the aim and task of the pedagogical process at the University; 4) showing respect and demands to students, strengthening their personal dignity; 5) taking into account individual characteristics and revealing their creative abilities; 6) possessing a teaching management democratic style, the ability to achieve unity of educational activities meaning and aims, etc.

Thus, in modern conditions, there is an acute problem of pedagogical incompetence and it is defined as the teacher's ability to use his or her specialty into a means of the student's personality forming, taking into account the restrictions and regulations which are in the educational process by the pedagogical norm requirements, in which it is carried out. Based on the numerous works on this subject analysis, we will distinguish five elements of pedagogical competency: special competency in the field of the taught discipline; methodological competency in the field of forming students' knowledge, skills and abilities ways; psychological and pedagogical competency in the education field; differential psychological competency in the students' motives, abilities, orientation of the personality field; the pedagogical activity reflection or autopsychological competency.

Structuring the "professional competence" concept allows us to add to its content such component as professional mobility of thinking (T. L. Kamoza, 2010; I. M. Polivoda, 2005).

To define the "professional mobility of thinking" concept, we will explain the concepts connected with it. Thinking is the external world indirect representation, which is based on reality impressions and allows a person, depending on the acquired knowledge, skills and abilities, to operate with information correctly, successfully build their plans and behavior programs. Professional thinking is the skills to analyze generalize and give generalized characteristics formation, to find non-standard solutions, to model professional activity situations. Professional mobility is the ability and readiness to acquire the missing knowledge and skills, to master new technologies providing the professional activity effectiveness (N. Chomsky, 1992).

Referring to these definitions in the above-mentioned scientists' works, it can be concluded that professional mobility of thinking is a capacious and ambiguous concept having a complex structure and is characterized by the following features:

- awareness of multi-variable development opportunities, the ability to relate personal value orientations with universal ones, perceive the world in motion, quickly adapt to rapidly changing conditions;

- active development opportunities search; motivation for self-education, achievements; an attitude to independence formation, activity and self-actualization;

- flexibility, readiness to quickly changing tasks, professional activity changes, new requirements and standards providing its effectiveness;

- modeling the professional future, career growth, an image of the future profession forming.

These are the main features of the definition under consideration in the aspect of the higher education theory and practice.

3. Results

Our research was conducted at the basis of Ulyanovsk state University, Ulyanovsk state pedagogical University named after I. N. Ulyanov and Samara national research University named after academician S. P. Korolev. The experiment was made among 336 students of various profiles and training fields, studying the discipline "Psychology and pedagogy". Based on this discipline specifics and its universality in the context of professional

training to students of Humanities, we have developed a criterion characteristic of our research process, reflecting the dynamics of the integrative criterion student's formation "psychological and pedagogical competency". This criterion consists of motivational and value, informational and cognitive, emotional and volitional and creative components. The motivational and value component determined the degree of a student's interest in psychological and pedagogical training formation, psychological and pedagogical knowledge, awareness of their significance for future professional activity, as well as the motives for using the institution educational environment for solving professional problems. The information and cognitive component reflected the readiness degree of using knowledge about people's individual psychological and personal characteristics, their behavior styles in cognitive and professional activities; ability to analyze modern trends in the psychological and pedagogical sciences development; ability to critically rethink the available information and accumulated experience. The emotional and volitional component characterized emotional stability in life and professional tasks solving, the volitional qualities formation, the ability to emotional and volitional self regulation of behavior, the desire to increase the level of psychological and pedagogical competency. The creative component reflected a personal creative potential adequate assessment, the creative abilities in solving professional tasks formation.

To identify the formation of the motivational and value component level, the diagnostic method "Assessment of the personal competitiveness level" was used. Ranking the final results according to their formation levels, we obtained the following dynamic: the number of students with a high level of personal competitiveness formation by the end of the experiment increased by 25% (from 17% to 42%), with an average level was by 11% (from 47% to 58%); students with a low level were not identified, their percentage ratio decreased from 36% to 0%.

To identify the formation level of the information and cognitive component, the diagnostic method "Reflection and self-assessment of educational and cognitive activity in the Internet environment" was used. The analysis of experimental results showed that at all levels of information formation needs, there was a positive dynamic by the end of the experiment: the respondents number with a high level of information formation increased by 19% (from 12% to 31%), with an average level it decreased by 11% due to the transition to a high level (from 62% to 51%), with a low level it decreased by 8% (from 26% to 18%).

In order to identify the dynamic of the emotional and volitional component formation, the diagnostic method "Study of volitional self-regulation" was used, which revealed the results for the subscales "Perseverance" and "Self Control". According to the perseverance index, the number of respondents with a high level at the end of the experiment increased by 14% (from 24% to 38%), with an average level it increased by 7% (from 41% to 48%), and with a low level it decreased by 21% (from 35% to 14%). According to the self control index, the number of respondents with a high level increased by 16% (from 26% to 42%), with an average level increased by 12% (38% to 50%), and with a low level it decreased by 28% (36% to 8%).

The dynamic formation of the creative component levels was studied using the method "Personal creativity diagnostics". The results of the experiment are also positive: the number of respondents with a high level increased by 15%, with an average-by 10%, and with a low level it decreased by 25%.

Thus, the analysis of the results obtained in the course of the study showed a positive dynamics of integrative criterion all components that are: students' psychological and pedagogical competency in the Informatization of the higher education process conditions.

The empirical data analysis of our research shows that the methodological approaches content analysis to the problem of the higher education specialist competence forming has allowed us to identify a modern University wide range of opportunities and create favorable conditions for the future specialists' competency formation, regardless of the profile and their professional training direction.

4. Conclusions

The problem content analysis of professional competency formation in the higher education theory and practice allowed us to consider the future teacher professional competency as an integrative personal education. It determines the ability to solve problems and tasks arising in the training, education and development process creatively, motivating further teacher's personality professional self-education and self-development. We found out that this concept does not have a single definition and has not received its exhaustive analysis in various Russian and foreign studies (scientific publications, dissertations, manuals, monographs, etc.). This is due to the methodological approaches variety outlined in this work (personal activity, system structural, knowledge, cultural, competence, etc.) in the scientific problems context solved by researchers. However, the main features and characteristics of the competence approach realization process to specialists of various profiles training can be distinguished: general, social and personal significance of the generated knowledge, skills, qualities and productive activities ways; clear definition of the personal and vocational improvement objectives, expressed in behavioral and evaluative terms; the identification of specific competencies that also are the personality development; the competencies formation as conceptual orientations, based on the national and universal culture learning; a clear system of measurement criteria presence that can be processed by statistical methods; providing pedagogical support to the emerging personality; the program individualization for choosing a strategy to achieve the aim; creating situations for practical use skills of knowledge and the acquisition of valuable life experience comprehensive testing; personality manifestations integrative characteristics connected with its ability to improve existing knowledge, skills and methods of activity as socialization and life experience.

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