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## **INFORMATION COMPETENCE AS A BASIS FOR STUDENTS' SELF- REALIZATION: PRACTICAL EXPERIENCE**

**Abstract.** The article deals with the ways of developing students' information competence and examines its impact on self-realization of students. The importance of the formation and development of future teachers' information competence in the paradigm of new approaches to higher education and its humanization is emphasized since information competence is one of the significant indications of their successful professional training. The correlation of competence with the personal characteristics of future teachers and their further potential for self-realization is analyzed. The concept of ‘information competence’ in the context of digitalization of modern education is considered. Education computer technologies software which was used in the course of the experimental research aimed at the development of future teachers' information competence is presented. In order to develop students' desire for self-realization, modern pedagogical software tools were used. A pedagogical experiment is described in the framework of which the students used the proposed software tools which boosted information competence and their desire for self-realization. To solve this dual assignment a special ‘Information and communication technologies of training’ course has been developed. The study of this special course involved fulfillment of creative tasks, presentation of students' own ideas and their employment in the course of pedagogical practice. While processing experimental data by statistical non-parametric methods, the main components influencing the students' desire for self-realization have been identified. Data of changes these parameters in experimental groups are provided, the conclusion about the positive influence of the described approach both on the development of information competence, and self-realization of students has been made.

**Keywords:** information competence; digital society; education process; competence approach; self-realization.

## 1. INTRODUCTION

The ultimate aim of acquiring higher education for university graduates is their employment to a desired job and self-actualization in professional activities.

Nowadays employers demand from graduates not only professional skills but also the ability to apply them in their professional field. Isolated knowledge is of no use without information and communication technologies. Generalized skills are of great significance. Employers are first of all interested in the competences of job applicants.

The concept of a competence-based approach in education is associated with the demands of global digitalization. On the job market a serious competition is being observed and strict professional requirements are to be met by future specialists, and efficient skills in information and communication technologies are crucial in digital society.

Information competence is now one of the most important constituents of the general professional and special competence of higher education graduates. And not least, this competence serves as a basis for further learning, self-development, and self-actualization of specialists in the course of their life.

**Problem statement.** Training competent specialists in the process of their education at higher education establishments suggests a fulfillment of many conditions on the part of students (for instance, presence of stable cognitive interests, self-learning skills, imitativeness, self-organization, striving for self-development and self-actualization) as well as on the part of higher education establishments for which it is crucially important to organize a well-designed education process and effective methods of its realization. Scholars and practitioners in education sphere constantly develop new technologies that are aimed at: training of the competent specialists who keep learning throughout their professional life, develop new skills, acquire knowledge, strive for self-actualization in digital world. Thus, at present the current priority for higher education is a formation and development of students' information competence.

**Analysis of actual studies and publications.** Competence approach is stated in the National Strategy for Education Development in Ukraine which aims at providing personal development of students, and among strategic areas indicates the necessity to modernize the structure, content of education on the basis of competence approach and its informatization [1].

In the context of the new standards all education programs and profiles of education programs in higher education are written 'in terms of competences' highlighting general and special (professional) competences of a higher education establishment graduate. In the European field of higher education and assignments within the framework of a competence-based approach are formulated as a preparation of students for competition on the labor market, their upbringing as active citizens of the democratic society, support of personal development in students, forming a high level of knowledge [2].

A good many scholars dedicated their studies to general pedagogical problems of competence forming: N. Bibik, I. Yermakov, O. Ovcharuk, I. Pogorila, O. Pometun [3], M. Golovan [4], S. Honcharenko, N. Nychkalo [5], O. Savchenko [6], and others. Within the system of higher education in Ukraine the most important contribution to actualization of the competence-based approach was to our mind made by Y. Rashkevych, V. Zakharchenko, V. Luhovyi. They elaborated 'Methodic recommendations for education programs development' with requirements to describe competences of graduates along with results of training [7].

Information competence was also a subject of investigations of many scholars. Theoretical basis and practical approaches to introduction of information communication technologies to

education process were formulated by V. Bykov [8], [9], M. Leshchenko, L. Tymchuk [8], A. Gurzhiy, O. Ovcharuk [10], M. Kyslova, S. Semerikov, K. Slovak [11], S. Lytvynova, V. Luhovyi [9], N. Morze, O. Kuzminska, V. Vember, O. Barna [12], O. Spirin [13], [14], M. Shyshkina, Yu. Zaporozhchenko [14] and others. Competence approach is stated in the National Strategy for Education Development in Ukraine which aims to ensure personal development of people and among strategic areas indicates the necessity to modernize the structure, content of education on the basis of competence approach and its informatization.

Problem research of self-actualization in education process and professional activities was undertaken in the works of N. Losyeva [15], O. Mykhalchuk, I. Nikolaesku, N. Stepanova [16], V. Muliar [17], I. Radul, I. Krasnoshchok, I. Lebedyk [18] and others. We stick to the thesis that ‘self-actualization is a constant process of perfection and improvement of a personality, a basis and condition of personal maturity, the most crucial need of a human being, a guarantee of personal freedom’ [15, p. 71]. Various learning technologies aimed at stimulating self-actualization process in education environment are studied by many scholars [9], [11], [12], [16], [19]. However, there is still a lack of studies of interconnection between the information competence development of future specialists and their striving for self-actualization. At the same time, it is obvious that information competence of a professional in any field of activities is a personal attribute reflecting a real level of training in the sphere of information communication technologies, and also a possibility to evaluate correctly the situation, take responsibility, develop efficient problem solving skills.

**The purpose of the research** is to present practical ways of establishing interconnection between improvement of future teachers’ information competence level, their professional and personal self-realization; to analyze their awareness of social and personal significance of knowledge; to single out categories of mutual influence between students’ information competence and actualization of their desire for self-realization.

## 2. RESEARCH METHODS

In order to conduct our research a set of theoretical, empiric and statistical methods were resorted to. In particular, the theoretical methods are: a study of legal framework, methodological and methodical works connected with the research problem, interpretation of literature sources, analysis and synthesis; empirical: examination, questioning, expert evaluation, pedagogical experiment; mathematical and static experiment data interpretation.

## 3. RESEARCH RESULTS

Higher education establishments formulate results of teaching on the basis of education programs in terms of competences which according to the Tuning methodology are defined as ‘a dynamic combination of knowledge, understanding, skills, and abilities’ [7, p. 8], [20].

We would like to emphasize that the results of teaching and competence are close notions.

Common in Ukraine is the definition of competence as a ‘dynamic combination of knowledge and practical skills, mindsets, professional, worldview and citizen qualities, moral and ethical values which define the ability of a person to perform successfully professional and further education activities and is a result of training on a certain level of higher education [21, p. 28].

It is also conventional to divide competences into two groups: subject-specific competences and generic, transferable skills. According to a specific education program future specialists acquire very important universal competences not closely connected with a field of knowledge (speaking a foreign language, the ability to self-learning, creativity etc.). Information competence is universal, as a social order requires from the specialists of any profile efficient skills in up-to-date information technologies. Information competence is an indication of professional readiness of specialists as well as a guarantee for their future employment. The more students are informationally competent the more they are in demand in digital society and a creation of conditions for the development of their information competence is one of the priorities for present-day education.

Information competence is viewed by scholars as the ability to search independently, analyze, sort, process and convey necessary information by means of modern information communication technologies. Scholars also define information competence as a combination of computer literacy and knowledge how to work with traditional sources of information, its critical perception, skills of communication. O. Spirin defines ICT competence as a proven ability of individuals to make practical use of information and communication technologies to meet their own needs and solve socially significant, and professional assignments in a particular subject area [13].

We note that scholars single out three constituents in information competence: information, computer and technological as well as processual ones. They state that this cluster of components is to be complemented with personal qualities of future teachers that express the ability to perform successfully their professional activities. These subjective features firstly concern association of a person with others, the ability to use information communication technologies in communication (communication component of information competence). Secondly, subjective features that concern relations of individuals with themselves also belong to information competence. It means the ability for self-awareness, self-development, exposure of mental qualities needed for successful implementation of the professional activities as well as the presence of motives and needs for self-improvement [22]. Scholars emphasize that the main aim of humanistic pedagogics in digital society is all-round personal development [8, p. 9]. Therefore, we share this approach with a number of scholars who view information competence through personal activities and a professional technological component. The first component suggests the ability for reflection, self-realization of one's own activities, communication ability, aptitude for self-realization, self-development and self-actualization. The second one defines a scope of professional knowledge and skills dealing with modern information communication technologies, the ability to employ them and solve professional problems.

The idea of the scholars appeals to us that in order to become informationally competent students should also be active participants in communication processes. The final aim of mastering information competence is the formation of an active, creative personality striving for self-realization and self-actualization. Information competence in the wide sense is treated as the ability of a person to comprehend the realities of information society and use all its options, the ability to adapt at length and self-actualize in the information society.

Thus, upon the basis of the all-round theoretical analysis we came to the conclusion that within the paradigm of digital humanistic society information competence can be defined as an integrative quality of a human being to demonstrate the ability to search for information and use the capacities of computer technologies for efficient work in professional and every-day life. It also serves as a means of self-actualization in the majority spheres of life activities.

We presume that information competence is acquired in the process of education and later on progresses as a result of self-education. Without application of information communication technologies nowadays is impossible to train specialists whose qualification would correspond to the rapidly changing realities of life and who would strive for self-education and self-actualization. This aim is hard to achieve without an appropriate support of this trend on the part of educators and higher education establishments management. Modern managers who adequately percept the needs of the society and react quickly to them understand the necessity of experimental research regarding the interconnection of information competence in students and their striving to self-actualization.

Our research was carried out on the basis of a higher education establishment ‘Vinnytsia College of Humanities and Pedagogics’ under the sponsorship of its headmaster. Students were proposed a set of activities aimed at increasing their information competence and actualizing their striving for self-actualization. The research was conducted in full compliance with the humanistic approach to education process, with a considered attitude to any innovation ‘not for innovations but for a person to create maximal conditions for their self-actualization and self-development’ [23, p. 64]. Taking into account the fact that modern information technologies within the system of specialists training fulfill the following functions: modernizing, modification, rationalizing the traditional education process, transforming pedagogical activities radically along with complex or combinatory one that ensures connection of elements of a traditional and an innovative teaching.

At the start of our experiment work the teachers applied modern software, for instance scribe presentations, a number of interactive online environments like Learning Apps etc. A special education subject ‘Information Communication Technologies for Learning’ was also developed and introduced for the students of school teachers’ department which includes a more detailed familiarization of innovative education methods, software tools, interactive technologies for teaching proposed by many authors including the authors of this article [12], [13], [16], [24], [25], [26], [27], [28].

An innovative system for interactive lessons **mozaWeb** is widely used (Fig. 1). Over a thousand of 3D-scenes, several hundreds of education videos, pictures, audios relating to learning subjects, applications and games are accessible online from any location.

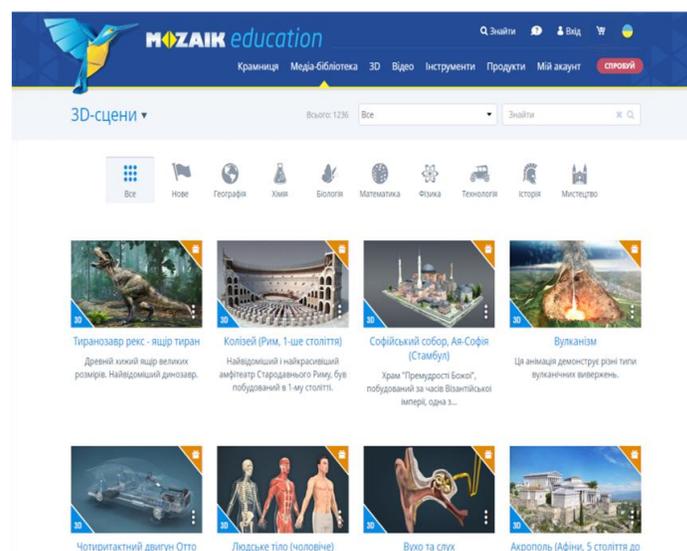


Fig. 1. MozaWeb interface

The online interface of the application allows students to find quickly and get access to personal digital textbooks, study guides, online homework and common content as well as monitor to-do assignments.

Via **mozaWeb** system teachers demonstrate an interactive presentation application **mozaBook** (Fig. 2) which allows to construct and conduct spectacular lessons. This application is used on the interactive board as well as on home workstations. **MozaBook** allows to make presentations necessary for lessons and due to online synchronization it makes them accessible from any device **mozaWeb** can run on. This application gives an opportunity to import PDF files and also make up your own notebooks where you can write and draw, display digital textbooks and complement them with new contents (videos, audios, 3D-models). To our mind, quite efficient is interactive cartographic application **mozaMap** (Fig. 3) with its digital atlases. In this way we demonstrate the capacities of extension tools at geography and history lessons.



Fig. 2. MozaBook application interface

Another efficient software is **LabCamera** (Fig. 3). It allows to make scientific observations and measurements via a computer and a web-cam. The functions quantity of applications, games and instruments of these apps are being regularly widened helping the students to acquire necessary skills while evoking their interest.



Fig. 3. Digital atlases of the mozaMap program and video real-time analysis with LabCamera

We note that presentation of traditional learning material was transformed to a maximal use of the above mentioned software to demonstrate in action the advantages of modern approaches to the education process. The teachers offered assignments related to their own projects using the capabilities of computer technologies which were mastered in the course 'Information and Communication Technologies of Learning'.

Thus, working with the interactive application **mozaBook** under the teachers' control the students developed education projects in different subjects. The best of them were presented to pupils of different ages. This referred to students who were on practice and used the described toolkit in their teaching activities. In the questioning held at the final pedagogical conference on completion of school practice 84% students noted as the most positive result their readiness for self-actualization in their professional activities due to the efficient use of information communication technologies at the lessons and out-of-school activities.

It is important to add that students also mastered a constructor application for planar geometry **Euklides** (Fig. 4) with the help of which it is easy to construct elements of figures and solve many geometrical assignments. Displaying various solid figures and surfaces in the application of planar geometry **Euler3D** allows to edit objects with a high level of mathematical control.

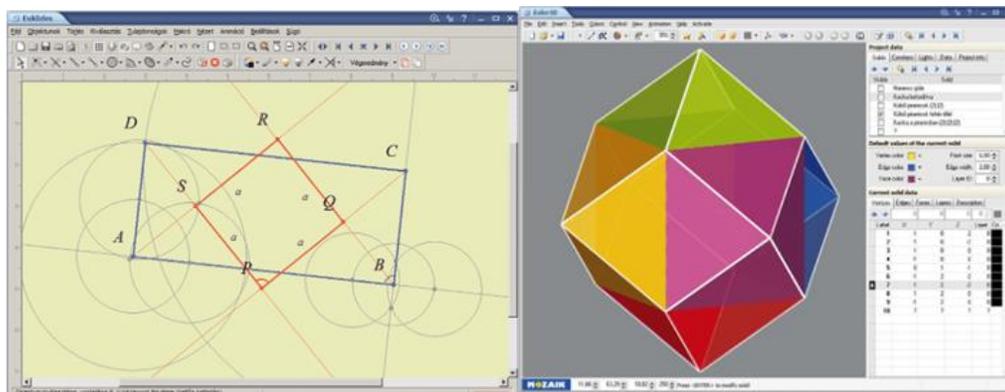


Fig. 4. Interfaces of constructor programs of planar and space geometry

Mastering a variety of instruments students come to understand that via illustrative, animated and interesting presentation instruments it is possible to variate a demonstration of any education material. However, it is not the main point, though it is very important for them as future professional educators. The main aspect that students noted in the course of the final questioning was awareness of their readiness for self-actualization in future professional activities and communication in digital environment. The projects, as students noted, not only enhanced their knowledge, skills, and competences but also considerably influenced certain identifiers of self-actualization: cognitive motives, inner motives, self-organization, motives of failure avoidance, attitude to the future profession.

In fact, lessons developing, the selection of education material and its presentation via the ultra-modern information technologies demonstrates a sufficient level of information competence of future educators and really provides them with maximal opportunities for self-development and self-actualization. The students emphasize that a possibility to construct spectacular presentations, supportive notes for an education topic, individual assignments will help them to

assimilate educational material and also give school students opportunities for self-realization. A kind of a chain reaction starts, from the teacher to the students. Besides, it is notable that only self-developing educators striving for self-realization and possessing a high level of information competence procure conditions for students to develop these self-processes.

We emphasize that almost all educators have their own set of technological tools which are being used in the present day information society. Here we will mention some of those used by us in the course of the education process with pedagogical college students (some of the tools were studied with the college students at the lessons and some were proposed for self-study).

**Pinterest** makes it possible to produce a kind of a storage of detailed lesson plans and interesting materials, besides it allows to attach almost any kind of picture considered to be interesting and important.

**Wikispaces** allows teachers to share their online lessons, media and other materials and students can have a possibility to interconnect for cooperation.

**StudySync** is an education platform with a multifunctional toolkit assists in conducting school lessons, containing a digital library, practical recommendations, multimedia lessons and assignments for them.

**Skype** is a perfect tool for cooperation with the students within the framework of education process which also supports a link with other educators for them to participate in online meetings.

Useful in education process are **FunBrain**, **Socrative**, **CarrotSticks**, **Khan Academy**, **MangaHigh** with wonderful collections of education games, quizzes, and other interesting education resources.

Scribing and video scribing by means of schematic drawings illustrates contents (even a complicated mathematical theory) and convey information in the most comprehensive and attractive form.

Technical tools, such as **Prezi**, **Planboard**, **Mentor Mob**, **Glogster**, **Creaza Google Education** allow to develop projects demonstrating creative abilities and general as well as professional competences of higher education recipients.

**Teachers Pay Teachers** gives an opportunity to share perfect lessons, sell materials for school lessons and acquire resources proposed by other teachers.

It is possible to make education videos by means of such online tools as **Educreations**, **Animoto**. **Knewton** assists in individualizing teaching process adjusting it to the needs of students. In this way it is possible to personalize educatory online content.

Via **Kerpoof** students can learn the material using interactive games, drawing and other tools. Comics make it possible to present the material through funny pictures with textual remarks via free service **Pixton**. Moreover, the above mentioned toolset has not yet exhausted all its capacities used by the students.

In order to diagnose students' level of information competence we selected three components: expert evaluations of teachers, self-evaluation of students and IC Literacy Test [29]. Herewith, the results of IC Literacy Test interpretation were fully automated and the students on completion the testing procedure could determine the level of their IC competence by one of the components mentioned and get recommendations for improvement. Self-evaluation of information competence level by students was performed through questionnaires while expert evaluation on the teachers' part was done according to the results of a generalized assignment. This assignment was developed by us as an efficient way of forming information competence and at the same time as an opportunity to apply other skills and personal qualities facilitating self-realization of students. The students were to choose assignments from three levels: reproductive (like traditional assignments from textbooks for applying knowledge in a familiar situation where

knowledge of basic algorithms, rules and formulas is important); productive (assignments demanding generalization of various points of view, problem interpretations, applying knowledge and skills in the new situation, quantitative and qualitative evaluation of parameters); creative (intersubjective generalized assignments). As an example we will give the problem statement of assignments of a third (creative) level.

Assignments: find, analyze and generalize information about ‘the golden ratio’. Support your presentation of the mathematical material via the capacities of computer technologies, graphical images (pictures, photos, own drawings), audio and video fragments of musical and literal works, presentation of natural phenomena etc. Present (differentially) the prepared material for demonstration at least for two different school lessons using a varied computer toolset. Substantiate your approaches to the presentation of the educational material and propose your self-developed mathematical assignments to the theme under study which allows the students to self-actualize maximally and apply certain information computer technologies.

This type of assignments (creative) is intended to promote:

1) Increase of information competence through the intensification of cognitive motivation to learning of the new computer technologies toolset as well as independent search, analysis, systematization of the necessary education content;

2) Intensification of striving for self-actualization in professional activities through unusual problem statement, its attractiveness, knowledge, transfer to new conditions, mastering patterns, models, associations, usage of inner and intersubjective connections, interactive learning technologies.

These assignments develop students’ skills and implement integral intention of learning material presenting, analysis of the results reflected in the project activities for pupils and, their self-actualization.

This type of assignments involves teachers’ expert evaluation. In order to form students’ information competence the following criteria were taken into account: interest in the activities with new information; awareness of the need to deal with computer technologies, knowledge and skills of applying a variety of methods to process information, skills of selecting efficient software means, inclusion into information society, organization and support of a group of students online, perfection of one’s own information competence on the basis of self-analysis etc.

The teachers noted increased interest in new knowledge concerning the methods of processing information and dealing with information technologies in 92% of students. 76% of students chose assignments of the third creative level which also demonstrates positive motivation in processing new information, active use of information technologies, awareness of information significance for self-education and self-actualization.

In the questionnaires students pointed out that due to creative assignments they formed a psychological setting to apply information-communication technologies in their professional activities; resorting to various additional materials and information resources; the need for self-actualization and the development of individual abilities in the information environment; to master new software, participate in professional communities and a desire to render real assistance to their colleagues.

We have developed a special diagnostic complex to measure indications of professional self-actualization of future teachers. We studied: 1) students’ attitude to their future professional activities (evaluated by a level of satisfaction based on the results of school practice); 2) professional attitude to themselves (evaluated by the level of self-evaluation of professionally significant qualities); 3) professional motivation and attitude to professional development (evaluated by the level of striving to professional self-development); 4) locus of control, taking

responsibility; 5) striving for self-actualization; 6) self-organizational abilities. Processing of the data acquired was performed by the methods of mathematical statistics and computer application 'STATISTICA'. It was found out, that no variable had a normal distribution, therefore non-parametric methods of data processing were used, such as gamma correlational analysis and factor analysis with the aim of disclosing of the main components. It was found out that a striving to self-realization was most of all influenced by motivation, especially by the 'inner motive' (0,91); the 'cognitive motive' (0,82) which we closely connected with mastering new education techniques; the 'motive of activities changes' (- 0,73). The second significant factor is a 'pedagogical position'. It is characterized by self-evaluation of professionally important qualities (0,76) and imitativeness (0,74). The third factor involves evaluation of the achieved results (0,71). The fourth one takes into account the level of a teacher's self-organization (0,71) and locus of control (0,68).

The formative stage of the experiment also involved (apart from a special information technologies course) stimulating in students the need for self-development and self-actualization due to a separate theme of the specialized course 'Professional teachers' self-development in digital society' (2 hours in total) and activities constituent of self-actualization which was arranged within the framework of practical activities.

The basis of the formative experiment was Municipal Higher Education Institution 'Vinnytsia College of Humanities and Pedagogics' where representational selection was made with 4 experimental groups: E1 (41SH – 22 students), E2 (42SH - 22 students), E3 (31SH - 31 students), E4 (32SH - 27 students), and 2 control groups: K1 (43SH - 20 students), K2 (44SH - 21 students). In general, 143 students participated in the experiment.

Comparison of the results in experimental groups on the ascertaining stage and control stages of the experiment proved that the conducted procedures: the specialized course designed which involves the study of new software tools, change of the college teachers' methods, formulating assignments for independent work in the form of projects, the development of innovative pedagogical scenarios of practical activities increased the level of information competence in of 88% students. Simultaneously having studied certain figures of self-actualization in professional activities we state that: the level of satisfaction with the teaching profession increased; self-evaluation of professional qualities became more adequate; the locus of control shifted to the side of internality; inner, cognitive motives, imitativeness, evaluation of the achieved results increased while avoidance of failures decreased.

*Table 1*

### Experimental data

<i>Categories</i>	<i>Ascertaining stage</i>	<i>Control stage</i>
Category 1 – cognitive motive	3,2	4,1
Category 2 – inner motive	2,8	4,2
Category 3 – motive of professional activities change	3,5	2
Category 4 – evaluation of professionally important qualities	3	3,7
Category 5 – imitativeness	2	3,3
Category 6 – evaluation of achieved results	3,5	4
Category 7 – level of self-organization	3,1	4,5
Category 8 – locus of control	2,5	3,1

This attests to the fact that the need in self-actualization and self-development increased (Fig. 5. Diagram). Changes that took place in students of the experimental groups were demonstrated in Fig. 5 and Table 1. At the same time, figures in the control groups didn't change considerably.

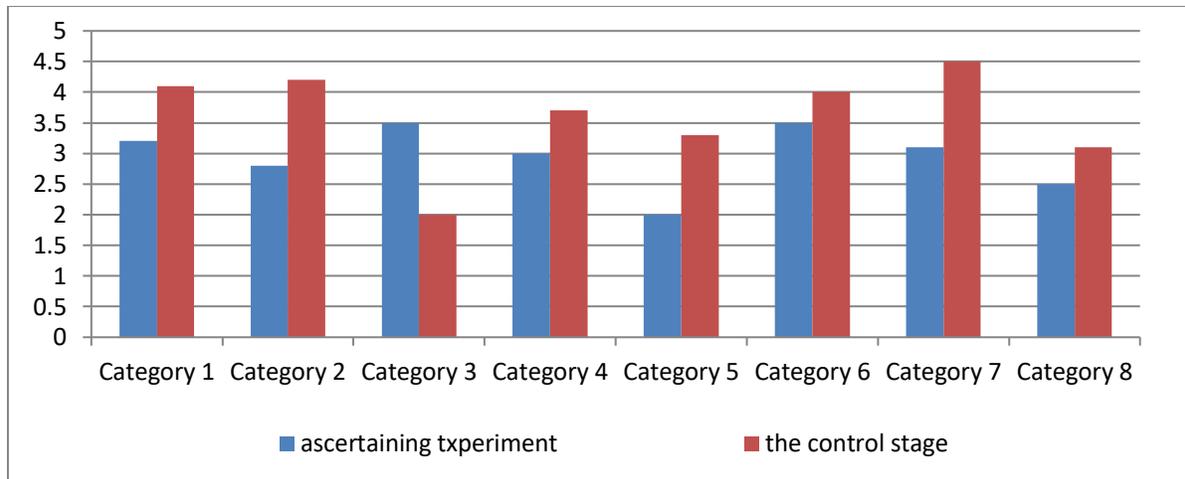


Fig. 5. Comparative indicators of personality self-realization components at the ascertainment and control experimental stages

With the aim of checking up the efficiency of the suggested approaches the criterion of  $\chi^2$  (xi-squared) was also used and the statistics criterion.  $T_e = 11,15 > T_{crit.} = 9,48$  points out considerable positive changes of figures in students of experimental groups.

The experimental results prove that improvement of information competence of students influenced their striving to self-development and self-actualization. Therefore, in digital society there is a sense of a more detailed study of these interconnections.

#### 4. CONCLUSIONS AND PERSPECTIVES OF FURTHER RESEARCH

Present-day society is largely digitized and this tendency is gaining momentum. It is highly competitive and this competitiveness will increase. Information competence of students and their striving for self-actualization will remain one of the basic requirements of the education system now and in the near future. Therefore, education process at higher education establishments must unconditionally include the study of innovations in the field of computer technologies and develop students' desire for self-realization. We managed to prove that professional competence of pedagogical college students and self-realization of their personality depends on the effective use of modern software.

We state that specially organized pedagogical influence on students: the developed special course, the study of new computer tools, personality-oriented creative assignments actualized both the need for the development of information competence and a desire for self-realization. The diagnostics and mathematical data processing of the experiment confirmed that the change of teaching methods and the use of the above-described practical ways of conducting classes have increased students' information level of competence.

The conducted experiment did not exhaust all problems connected with the research. Information competence can repeatedly be diagnosed more precisely, as it is developing transferring from one level to another, at the same time stimulating the need for self-actualization. Further systemic integral study of information competence is necessary to continue as well as its interconnection with self-actualization.

A set of problems requires further research that will make it possible to find out interaction of various components of information competence and by methods of factor analysis to investigate which of them can be ignored, and which have a decisive impact.

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## ІНФОРМАЦІЙНА КОМПЕТЕНТНІСТЬ ЯК ОСНОВА САМОРЕАЛІЗАЦІЇ СТУДЕНТІВ: ПРАКТИЧНИЙ ДОСВІД

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**Анотація.** У статті презентується досвід розвитку інформаційної компетентності студентів та досліджується її вплив на самореалізацію особистості. Акцентується увага на важливості розвитку інформаційної компетентності майбутніх учителів у парадигмі новітніх підходів до вищої освіти та її гуманізації, оскільки інформаційна компетентність є одним з критеріїв підготовки сучасних педагогів. Проаналізовано взаємозв'язок інформаційної компетентності з особистісними характеристиками майбутніх учителів і можливостями їх подальшої самореалізації. Розглядається поняття «інформаційна компетентність» в умовах цифровізації сучасної освіти. Презентовано сучасне програмне забезпечення інформаційно-комунікаційних навчальних засобів, які застосовувались у нашому експериментальному дослідженні, що було спрямоване на формування і розвиток рівня інформаційної компетентності майбутніх фахівців. З метою розвитку у студентів потреби в самореалізації використовувались сучасні педагогічні програмні засоби. Описано педагогічний експеримент, у межах якого студенти використовували запропоновані програмні засоби, що сприяло підвищенню інформаційної компетентності та їх прагненню до самореалізації. Для вирішення цього двоєдиного завдання було розроблено спеціальний курс «Інформаційно-комунікаційні технології навчання». Вивчення вищевказаного спецкурсу передбачало виконання творчих завдань, презентацію студентами власних ідей та реалізацію їх під час проходження педагогічної практики. Під час обробки даних експерименту статистичними непараметричними методами виокремлено основні компоненти, що впливають на прагнення особистості до самореалізації. Наведені дані про зміни цих параметрів в експериментальних групах, зроблено висновок про позитивний вплив описаного підходу як на розвиток інформаційної компетентності, так і самореалізацію студентів.

**Ключові слова:** освітній процес; цифрове суспільство; інформаційна компетентність; компетентнісний підхід; самореалізація.

## ИНФОРМАЦИОННАЯ КОМПЕТЕНТНОСТЬ КАК ОСНОВА САМОРЕАЛИЗАЦИИ СТУДЕНТОВ: ПРАКТИЧЕСКИЙ ОПЫТ

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**Аннотация.** В статье представлен опыт развития информационной компетентности студентов и исследуется ее влияние на самореализацию личности. Внимание акцентируется на важности развития информационной компетентности будущих учителей в парадигме новых подходов к высшему образованию и его гуманизации, так как информационная компетентность является одним из критериев подготовки педагогов. Проанализирована взаимосвязь информационной компетентности с личностными характеристиками будущих учителей и возможностями их дальнейшей самореализации. Рассматривается понятие «информационная компетентность» в условиях цифровизации современного образования. Представлено программное обеспечение учебных компьютерных технологий, которое использовалось в процессе экспериментального исследования, направленного на развитие информационной компетентности будущих педагогов. С целью развития у студентов стремления к самореализации использовались современные педагогические программные средства. Описан педагогический эксперимент, в рамках которого студенты использовали предложенные программные средства, способствующие повышению информационной компетентности и их стремлению к самореализации. Для решения этой двуединой задачи был разработан специальный курс «Информационно-коммуникационные технологии обучения». Изучение вышеуказанного спецкурса предусматривало выполнение творческих заданий, презентацию студентами собственных идей и реализацию их во время прохождения педагогической практики. В процессе обработки данных эксперимента статистическими непараметрическими методами выделены основные компоненты, влияющие на стремление личности к самореализации. Приведены данные об изменениях этих параметров в экспериментальных группах, сделан вывод о положительном влиянии описанного подхода как на развитие информационной компетентности, так и самореализацию студентов.

**Ключевые слова:** образовательный процесс; цифровое общество; информационная компетентность; компетентностный подход; самореализация.



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