

### Ways to improve the information culture of students

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**Abstract.** Along with the basic features of students' culture information, with its widely usage oriented on implementation of the new information technologies in educational process that determines the search for ways of pointing to the similarity of interdisciplinary connections content, aims and objectives of the study. In this regard, the article questions about students' information culture, and also presented information about the aims and objectives of the information culture process among students. In the formation of a professional interest in relevant information, which is an opportunity to assist in informing the professional activities of the essence of effective use of interactive methods and innovative technologies in the learning process. The result of the experiment proves the effectiveness of the information culture process of students in training the system of higher education based on the credit technology. The main purpose of this paper is a comprehensive review of students' information culture.

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#### Introduction

Socio-political and economic development of Kazakhstan requires updating higher education and training of highly qualified specialists, the demand in the labor market. Improvement of the quality of education, defines one of the basic indicators of the development of society, namely, the transition to a phase of development. To date, the effective use of information has identified the progress of scientific and technical development of humanity, the economy, politics, became a defining force behind the development of the information society. Today there is a wide education process, introduction of new information technologies, the main features of the development of information culture of the students, its applications, finding similarities of inters subjective relations is accurate by defining content, goals and objectives of the training.

One of the objectives of higher education - is formation has an information culture, using new information technologies in the educational system. Information technology (IT) is the application of computers and telecommunications equipment to store, retrieve, transmit and manipulate data [1], often in the context of a business or other enterprise. The term is commonly used as a synonym for computers and computer networks, but it also encompasses other information distribution technologies such as television and telephones. Several industries are associated with information technology, including

computer hardware, software, electronics, semiconductors, internet, telecom equipment, e-commerce and computer services [2]. After getting the information education of each student must be able to freely use and be able to analyze the information, since in the process of formation of the correct use of information is the basis for the development of education. During the educational process is increased intellectual activity of the participants.

#### Research topic

"Information culture" is a part of the general culture of the ability to use educational skills and rules in the field of information management, fluent in the information world, locates the necessary for a free data (documents) [3].

Authors of tutorials (T.A. Kudrin, N.B. Zinoviev, V. Minkin) regard information human culture in education, in values, in trust, in the direction of defining a common set of utility: since the formation of the information culture is reflected in his daily life, in the family, in the process of studying and working, self-directed learning based on knowledge gained from the media [4].

Computer technologies in education and the use of technology, basic scientists engaged in the pedagogical-psychological issues in education: I.I. Antipov, Y.E. Bidaybekov, J.A. Karaev, A.A. Kuznetsov, E.I., Kuznetsov I.V., Robert, G.K. Nurgaliyeva, V.V., Ershov, M. Grinushkin and

others, in his writings indicate the use of information technology in practice in secondary and higher educational institutions, the management of cognitive activity, content of objects and their methods, means, modes of learning and monitoring of results on the basis of new didactic environment [5]. The new structure; need to organize, search, and specify the activity results of the pedagogical-psychological description [6].

Key issues associated with the use of computer technology in education, effective solutions to problems of information education, the formation of the information culture is widely considered such teachers as scholars: S. Papert, V. Laudis, G.I. Datsyuk, I. Robert J.A. Karaev, S.M., Kenesbaev, K. Tulbasova, D. Dzusubalieva, K.Z. Khalikova [7].

In schools and universities in the development of the theory and methods of teaching computer science major contribution made by such scientists: S.A. Beshenkov, A.G. Gaine, S. Grigoriev, S.A. Zhdanov, A.A. Kuznetsov, E.I. Kuznetsov, Y. Lapchik, M.P. Branovo A.S. Lesnevskiy, T. Dobudko, A. Rummyantsev, V. Pugach, V. Sholohovich, E.K. Jenner, as well as the following scientists of Kazakhstan: G. K. Nurgaliyeva, Y.E. Bidaybekov, A.O. Tadziguilova, S.S. Kunanbaeva, S.A. Abdimanapov, A. Sharipbaev, B. Boribaev, E.K. Balapanov, G. Mutanov etc [8].

The aim of the study is to define the ways of formation of information culture in the process of training university students.

### Research methods

With a view to identifying ways of forming of the information culture in the process of training university student's survey was conducted. In the survey participated of 287 students.

Studies have shown that the experiment had been hampered by students in jobs associated with the formation of the information culture student. As a result of surveying 287 students revealed that, on average, higher level of information culture meet only 10 per cent-lower level-60% (50% in the experimental group, 40% in the control group) (table 1).

**Table 1. The level assignments students associated with formation of informational culture. (The experiment)**

#	Groups	Of students	Levels (%)		
			Highest	Average	Low
1	Experimental Group	147	10	40	50
2	Control group	140	12	38	40

Experimental results indicate that much difference between the experimental and control performance groups.

Based on the results of studies in the site "contents" section of this article, work was done on the development of the above data. Followed by a second questionnaire and found the following results. (Table -2,).

**Table 2. Levels of jobs associated with the formation of the information culture after the experiment with students**

#	Groups	Of students	Levels (%)		
			Highest	Average	Low
1	Experimental Group	147	31	49	10
2	Control group	140	20	50	30

According to the results of the study progress levels of jobs associated with the formation of the information culture. A statistical analysis of studies to determine the entity results.

Important mathematical-statistical method of study which aims to determine the effectiveness of an experienced pilot.

In view of the need to process the results, regular statistical methods research was selected – Chi-square method. The above method has been used to verify the similarity classification empirical functions. The conditions for determining the precise, balanced, the possible values of the hypothetical methods. To determine the average or standard use of anomalies is not Chi-square method measurement is required. Its advantage is that it is enough to know only two frequencies Division made the results of variability. This statistical method designed to handle high-quality information [9].

So, to handle the latest research and experiment determination of aggregation method was used Chi-square. This criterion refers to the exposure of electoral change in some cases.

General statistical hypotheses processed clarified as follows:

$N_0$  – formation of the information culture students affect the effectiveness of the educational process;

$N_1$ -forming of information culture of students does not affect the effectiveness of the educational process.

Comparison between the responses of participants to prove the hypothesis. Coefficient degree of liberty to  $f$  in this case  $2-1 = 1$ .  $\alpha = 0.05$ ,  $f = 1$  "x 2" paradigm to verify table  $x + 0.05 (1) = 3.8$ . So,  $x 2 x + 0.05 < (1)$  hypothesis is equated to zero. That is, the formation of the information culture students with full response is directly proportional to

the effect on the efficiency of the educational process.

### Content of research

Research work aimed at formation of information culture, held between students studying information of physic-mathematical faculty of national Pedagogical University named.

Therefore, the curriculums of the course have been programmed by elective, public education and other technologies. In this direction in many institutions of higher learning in the mathematics faculties were set up computer courses and courses in information technology, to improve the training of teachers and students. This sets the stage for addressing not only the training of the students of the discipline but also the teacher's professional development in learning and retaining knowledge of specialized courses in information technology. In higher education, curricula, data have been collected practical knowledge and developed new educational-methodical works [10].

This course provides the opportunity to develop an information, education and culture, and also forms the qualifying works. Issues in computer Didactics of teaching issues informing educational works [11], creates the possibility of using modern information technology: using the potential of information and communication technologies in the learning process; Office documents, prepare handout and test materials, Visual AIDS; use of Internet resources and information systems for the exchange of creative experience of staff; the use of information technology in education; physiological and psychological and pedagogical aspects of training computer technologies; the use of electronic tools in the learning process; the use of information technology for the formation of students' information culture, using informational technology in a broad profile of project activity.

Use the above curriculum by students in practice:

- creates conditions for the emergence of the basic concepts of computer and new information technologies;
- generates the necessary skills and knowledge in working with the newest information technologies;
- teaches planning educational process through the use of media of instruction (determining the effectiveness of the use of new information technologies in educational process, its capabilities and use take into account routine methods);
- allows you to understand and organize the work of students, using new information technologies;

- allows you to manage knowledge and professional development by using new information technologies.

In teaching undergraduate course cultural blog, didactic principles, takes into account the close relationship between the training materials and training content. Purpose of this course is to study the formation of the information culture in the minds of the students' findings. Based on the methods and experience of information culture of students through the use of information technologies in the system of credit education in foreign and domestic high schools:

-Realization of tasks to implement the formation of information culture, basic concepts of information resources, the role and importance of the information society;

-However, the ability of students to use information and communication tools, the ability to use information and knowledge professionally oriented refill information;

-To develop students interest professionally meaningful information and effective use of interactive methods and innovative technologies;

-The possibility of the conviction that students under credit system of higher education, and distance learning method using the Internet, students delve into a worldwide network of knowledge through emails and replenish necessary knowledge, finding the right information, using advanced scientific expertise in the fields of science, have access to foreign news Distance education, distance learning or D-Learning is a mode of delivering education and instruction, often on an individual basis, to students who are not physically present in a traditional setting such as a classroom. Distance learning provides "access to learning when the source of information and the learners are separated by time and distance, or both [12]. Distance education courses that require a physical on-site presence for any reason (including taking examinations) have been referred to as hybrid or blended courses of study[13,14].

The study proved that the students effectively information culture is embedded in the credit system of education technology in high schools.

### Conclusion

The purpose of the article is comprehensive information culture of students. In the mentioned continuous research work will be undertaken to develop communicative competence of students through pedagogical means of information technologies and formation of pedagogical-scientific preparation processes.

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