

AZERBAIJAN REPUBLIC

In the manuscript right

ABSTRACT

of the dissertation in pedagogy for of Doctor of Philosophy

**USE OF ICT IN THE TRAINING PROCESS
AS A MEANS OF FORMATION OF
PEOPLE'S INFORMATION CULTURE**

Speciality: 5804.01 - General pedagogy, pedagogy and
educational history

Field of science: Pedagogy

Applicant: **Almaz Israil Hasrat**

Baku– 2023

Dissertation work has been completed at the department of Education Theory of the Institute of Education of the Republic of Azerbaijan

Scientific leaders:

doctor of technical sciences, professor
Abdulla Oruj Mehrabov

Ph.D. in pedagogy, associate professor
Anvar Mahammad Abbasov

Official opponents:

doctor of pedagogical sciences, professor
Shahla Gasim Aliyeva

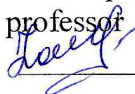
doctor of pedagogical sciences, professor
Lazifa Nagi Gasimova

Ph.D. in pedagogy, associate professor
Vidadi Pasha Bashirov

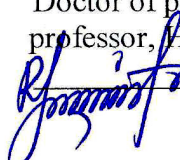
Dissertation Council FD 2.15 of Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at the Azerbaijan State Pedagogical University

Chairman of the Dissertation Council: Doctor in historical sciences, professor
Jafar Mammad Jafarov

Scientific secretary of the Dissertation Council: PhD in pedagogical sciences, associate professor


Melek Alislam Zamanova

Chairman of the scientific seminar:

Doctor of pedagogical sciences, professor, Honored Scientist

Farrukh Abbas Rustamov

GENERAL CHARACTERISTICS OF THE STUDY

The urgency of the problem. Today's students are online and growing up in the computer world. Modern information technologies become a part of their lives. Their access to the Internet though not complete, it is a larger part of their life. The present students differ greatly in the way of thinking and acceptance of information from their parents. These differences inevitably recreate the school establishment, regulated by the development of society in the current situation makes it a duty to consider the requirements.

Reforms already implemented in our country and these reforms adoption of documents defining strategic steps Identify measures to support the development of Azerbaijan allowed to be. In particular: “Azerbaijan 2020: To the Future review” Development Concept (2012), with other areas, Adoption of provisions related to informatisation of education “Informatisation of the education system as a whole One of the main directions of modern education as, will always be in the spotlight. For this purpose, in 2013-2020 years Adoption of the State Program of Education system in the Republic of Azerbaijan on informatisation will be done. All of Azerbaijan within the State Program educational institutions (including those located in remote areas schools) will be provided with internet connection, each education will be equipped with the necessary technical equipment and all connection of educational institutions to a single educational network will be implemented. In “Development of education in the Republic of Azerbaijan State Strategy” (2013) five direction special emphasis on informatisation when defining steps given, focus on it as one of the most important attributes of development was carried out. In the “Strategic Road Map for the National Economic Perspective of the Republic of Azerbaijan” (2016) modern social, human capital required for economic and cultural conditions education deemed necessary for the purpose of formation Improving quality is perceived as a separate direction. The document states, “along with the development of new technologies, an increasing global security risk manage-

ment challenge is also relevant for Azerbaijan. Advanced technology in addition to imports, but also managing human capital forming a new global way of thinking in general development will be carried out in accordance with the challenges and trends.

Acting as the main subject in the implementation of all this further development of the student's skills, in the context of the formation of the information society increase adaptation opportunities, with the necessary information be able to communicate and use ICT expansion stops. There is a need for appropriate research identify these opportunities and use them formation of information culture by realization.

The use of ICT in the education system as an object of research attracted the attention of our scientists. Among them are R.M.Aliguliyev, Z.I.Garalov, A.O.Mehrabov, A.N.Abbasov, R.F.Mammadzade, N.A.Orujaliyev, R.Sh.Mahmudov, R.Sh.Mahmudova, A.A.Aslanov, V.H.Mahmudov, I.Kh.Ismayilov, T.A.Rzayev, S.N.Gojayev, R.H.Asadov, H.B.Baliyev, A.A.Agayev, N.A.Abdullayev and others various modern pedagogical and information technologies provided valuable information about, their essence, content, forms, ICT and mechanisms of its use, method and tools, applied issues in the learning process. However, information on the use of ICT in students as a means of influencing the formation of culture not investigated.

Research has shown that information culture, first of all, the information that a person sees, hears and reads It depends on proper mastery, proper self-education. Necessary in conditions of abundance of information the ability to collect information, the culture of dealing with it begins in the school years in children. General education in this regard the school has more responsibility. During teaching subject formation of ICT information culture, no work has been done to turn it into a tool. Modern information culture as a value in student formation has been neglected.

What to do for this? How to share information with others so that it is safe ways to determine whether it affects should be sought.

“Students use ICT in the learning process as a means of forming an information culture” dissertation is devoted to this problem.

The object of research is the process of forming an information culture in secondary schools.

The subject of research is during the formation of information culture students using from ICT as a tool in secondary schools.

The aim of the research is to use ICT as a tool in the learning process using high school students as theory of formation of information culture and clarify practical issues, information opportunities and ways of work on the formation of culture consists of identifying.

According to the purpose and hypothesis of the study, the following responsibilities are defined:

- Information culture as a pedagogical concept determination of the essence of its formation;

- pedagogical, psychological and sociological study of the problem situation in research;

- the situation in school practice in terms of the problem identification;

- students using ICT in the learning process the key to the formation of information culture determination of conditions and driving forces;

- Information for students using ICT pedagogical principles of culture formation determination;

- Information for students using ICT opportunities and ways of forming culture identification.

The methodological basis of the research is a set of means of the world pedagogical fact, study, understanding, change of events and processes Theoretical provisions, principles, methods and constitutes. During the research theoretical analysis and composition, pedagogical observation, interview, questionnaire survey, study of school practice, mathematical statistics, pedagogical experimental methods were used:

1. Theoretical analysis and composition. In order to clarify the level at which the problem is studied, the existing scientific-pedagogical, psychological, philosophical and methodical literature, local and foreign electronic educational resources, information society and informatization of education, studies conducted on the application of ICT in the educational process were studied and analyzed, and generalizations were made. relevant conclusions have been drawn.

2. Pedagogical observation. In the learning process, in extra-curricular activities, when using ICT, while on the Internet and in public places, students' behavior and attitude, communication style, attitudes towards their teachers, parents, peers, others, sharing in the virtual world, how they develop their positive qualities, how they develop their negative qualities. eliminations were observed and studied.

3. Pedagogical interview and questionnaire survey. Interviews were conducted with 125 teachers and 443 students of the general education school intended for the experiment, and a questionnaire survey was conducted.

4. Learning and generalization of school experience. School No. 114, No. 193, No. 204 and 245 of Baku, School No. 11 of Sumgait city, Zayam settlement of Shamkir district named after S. Mammadov, School No. 3 named after I. Qayibov of Gazakh district, Gazli village school named after B. Rahimov, Sabirabad district, Kurdamir city No. 3 The work system of the school named after S. Abdulkarim of Balagusar village of Gusar region was addressed. For this purpose, the work experience of subject teachers and students of those schools related to the use of ICT was studied, analyzed and systematically summarized.

5. Mathematical and statistical methods. As a result of grouping the data obtained with the help of survey and experimental methods, it was possible to make generalizations and determine quantitative dependencies between the studied phenomena. Those methods created opportunities and conditions for evaluating the

indicators of the experiment, the reliability of the results, and the successful conduct of theoretical generalizations.

6. Pedagogical experiment. In order to verify the correctness of the hypothesis put forward - in 2013-2017, S.Mammadov, number 114 of Surakhani district of Baku, number 193 and 217 of Binagadi district, number 204 and 245 of Khatai district, number 1 and number 11 of Sumgait city, Zeyam settlement of Shamkir district in the school named after I. Qayibov of Gazakh district No. 3, in Gazli village school named after B.Rahimov in Sabirabad district, in Kurdamir city No. 3, in schools named after S.Abdulkarim of Balagusar village of Gusar district (VI, VII, VIII, IX, X, XI in classes) experiments were set. Determining, training and verification stages of the experiment were used.

In the teaching process, the teaching methodology of the lessons conducted using pedagogical software tools and electronic teaching resources was developed, the tools affecting the formation of information culture were determined, the accuracy of the obtained results and generalizations was checked, the accuracy of the conducted work was studied, comparative analyzes were conducted and summarized.

The research base is based in Baku, Sumgait, Gazakh, Shamkir, a number of cities and districts of Sabirabad, Kurdamir, Gusar experimental work in secondary schools (grades VI-XI), as well as on the topic of the author of the dissertation methodical aids, 28 years of pedagogical activity.

The research was conducted in 2013-2017. The whole period of research can be conditionally divided into three stages. This literature was studied in stages, experiments were set, seminars (courses) were conducted and analyzes were conducted.

In the first stage (2013-2014) the result of the state of the problem is formed, experimental work a defining experiment that defines the program conducted. Data clarified, information from ICT, which will influence the formation of culture aimed at finding effective ways of use technology developed.

Instructor of our research in the second stage (2014-2015) experimental based on technology as an experiment work has been done. Meetings with teachers and students, seminars and courses were organized.

Organize a test experiment in the third stage (2015-2017) the materials obtained, generalized and the analysis was conducted and the results were summarized. Scientific novelty of the research. ICT of students in the dissertation work on mastering the information culture through given the system, information on student development the role of culture formation is substantiated, the essence of information culture, ways of effective organization, methods, students' information when using ICT pedagogical conditions in the formation of culture and opportunities, online ethics in pedagogy, netiquette, netizen as new concepts were reflected for the first time.

Practical significance of the research. The reflection in the dissertation ideas found, research results from ICT in the learning process formation of information culture during use secondary schools in establishing effective control over the process will help teachers. Established with the help of ICT lesson model of new programs in teaching subjects, methodical in the preparation of materials, textbooks and teaching aids, improving and retraining teacher's ICT skills can be used in the preparation.

Theoretical significance of the research. In the training process using from ICT student's information culture substantiated arguments concerning the problem of formation ideas are new to the theory of pedagogy, especially didactics will enrich it with ideas and provisions.

Reliability of research. The results obtained from the work methodological basis of research on reliability, subject of research, research methods selected in accordance with the goals and objectives to qualitatively characterize the complex, researched processes identification of empirical materials necessary for analysis of collected materials ensures.

Provisions submitted for defense.

1. Pedagogy of formation of information culture exploring it as a concept, mastering it as a value expands its capabilities.

2. Formation of information culture of students more efficient activity in the information society, allows you to find appropriate materials.

3. Relevant principles and preconditions established information culture as a didactic basis identification of opportunities and ways of formation provides.

Scientific novelty of the research. In the dissertation, the system of work on the acquisition of information culture by students through ICT was given, the role of the formation of information culture in the development of students was justified, the essence of information culture, the ways and methods of its efficient organization, the pedagogical conditions for the formation of information culture of students when using ICT. and possibilities, new concepts such as online ethics, netiquette, netizen in pedagogy have been reflected for the first time.

The theoretical significance of the study. Reasoned ideas about the formation of students' information culture using ICT in the training process will enrich the theory of pedagogy, especially didactics, with new ideas and provisions.

Practical significance of research. The ideas reflected in the dissertation, the results of the research will help the teachers of general education schools to effectively control the process of formation of information culture during the use of ICT in the educational process. The lesson model built with the help of ICT can be used in the preparation of new programs, methodical materials, textbooks and teaching materials in the teaching of subjects, and in the improvement and retraining of teachers' ICT knowledge.

Approbation and application of research results.

The results of the study were published in 8 republics and 12 international countries in his speeches at the conference and the High Attestation Commission 17 local and 5 foreign articles published in recommended publications reflected.

Public Television in connection with the content of the dissertation extensive publicity in the programs “Open lesson” and “Common denominator” discussion was organized. By the author “ICT in education and information culture” methodical manual has been developed. The lesson model developed by the author using ICT is already available, he has been teaching various subjects in Azerbaijani schools for 8 years. Also for biology since 2008 the subject site prepared by the Ministry of Education written for secondary schools as an electronic source in a biology textbook included in the bibliography.

Proposed work 114, Binagadi, Surakhani district of Baku 193 and 217 of the district, 204 and 245 of the Khatai district, Sumgayit 11, Shamkir district, Zayam settlement named after S.Mammadov, Gazakh district named after I.Gayibov 3, Sabirabad district’s Gazli village named after B.Rahimov, Kurdamir city number 3, Gusar district’s Balagusar village schools named after S.Abdulkarim of the region applied and the results used.

The structure of the dissertation. The dissertation consists of an introduction, 2 chapters that include 7 paragraphs, a conclusion, and a list of used literature. Introduction – 13 pages, 25717 marks, Chapter I – 55 pages, 104950 marks (1.1. – 12 pages, 24274 marks; 1.2. – 30 pages, 62596 marks; 1.3. – 13 pages, 18081 marks), Chapter II – 77 pages, 140545 marks (2.1. – 22 pages, 44289 marks; 2.2 – 24 pages, 43743 marks; 2.3. – 15 pages, 315421 marks; 2.4. – 16 pages, 20972 marks), result – The total volume of the dissertation is 162 pages and 277585 marks, consisting of 4 pages, 7164 marks and a list of used literature.

MAIN CONTENT OF THE STUDY

The introduction justifies the urgency of the problem, the research object, subject, goals and objectives, hypothesis, methodological basics, scientific novelty, theoretical and practical significance, defense the extracted provisions are reflected.

Chapter I called “General theoretical and practical issues of research”.

This chapter consists of three sub-chapters. The first sub-chapter is “Formation of information culture is pedagogical as a concept”. First of all, the subject of research “Information and information culture” is clarified the concept is clarified. It is concluded that the information culture of man depends on more than a true self-education. The student's general information culture of information setting, storage, processing, security from the sum of the culture of making and presenting consists of. Information culture as a new pedagogical concept enters the education system and new methodological changes, new the emergence of teaching methods, information in students influences the formation of culture.

The second sub-chapter is “Pedagogical, psychological and sociological literature on the problem Analysis”. The local and foreign scientific works a wide range of pedagogical, psychological and sociological literature related to the problem analysis was performed. A pedagogue of information culture discusses the importance of the concept in world educational practice made theoretical generalizations, scientific literature the importance of the problem has been commented. Known R.M.Algulyev, R.A.Aliyev, A.G.Palangov, M.A.Alishov, N.A.Abishov, R.N.Mahmudov, N.S.Rustamov, I.B.Ahmadov, A.G.Kozlenko, N.I.Gendina, I.I.Tikhonov, S.F.Anisimov, L.A.Belyakova, B.D.Simonenko, Í.V.Robert, On information in the works of R.Williams, N.Wirth and others issues related to the formation of skills. However, the formation of information culture is special has not become the object of research. General education schools review the problem statement in textbooks, teaching aids and analyzes were conducted. It was revealed that, only one computer science textbook addresses this issue in schools touched by the subject.

The third sub-chapter of the dissertation is “School in terms of problems study of the situation in practice”. In this sub-chapter information of students during the use of ICT in the learning process problem of formation of culture of our republic situation in second-

dary schools (grades VI-XI) studied. The following directions are key for this:

1. The level of ICT provision of schools identify.
2. Information from school management to students carried out in connection with the formation of culture to determine measures.
3. To study the attitude of school management to the problem;
4. To determine the level of use of ICT by subject teachers;
5. To study the situation of formation of information culture in students and analyze how they can achieve this.

The level of ICT provision in schools was studied. For this purpose, an online survey was prepared and the results were finalized in the Google.doc document preparation service. (The results of the surveys conducted with teachers can be found in table 1.2 on page 63 of the dissertation) It was found that the provision of schools with ICT is mostly at an average level. So, computer equipment either does not exist, or it is impossible to use the existing ones correctly. We analyzed the responses received from the general survey shared on Facebook within 1 hour (the results of the responses can be found in table 1.1 on page 61 of the dissertation).

Ask Baku, Sumgayit, Absheron, Garadag, Gobustan, Ismayilli, Shamkir, Gazakh, Zardab, Agdash, Salyan, Samukh, Bilasuvar, Guba, Gusar, Lerik, Ganja, Shabran, Yevlakh, Tovuz, Agjabedi, Goychay, Fuzuli, Neftchala, Balaken, Gadabey, Lankaran, Zangilan, Gakh, Masalli, Shirvan, Tartar, Saatli city and district school principals, deputy principals, psychologists and subject teachers attended. Based on the results of the surveys, it was found that the school leaders pay very little attention to the issues of organizing the formation of information culture in students using ICT.

While studying the situation, it was also observed the indifference of the school principal, his deputies, psychologists and subject teachers in the students' acquisition of information culture by using ICT.

Results of inquiries shows that, it became clear that school leaders pay very little attention to students using ICT the organization of

the formation of information culture. Students also use ICT when studying the situation in mastering the information culture by doing, school director, deputies, psychologists and subject teachers the indifference of many was observed.

Surveys have shown that students at school use ICT very rarely, only in computer science class happens in front of a computer, from the required site and social networks unable to use correctly, unspecified data is based on retail sharing, what online ethics is all about be able to understand the presence of “positive” and “negative” information they can't pay attention. Different from ICT in the research process It is also known that it is not used at the same level in subjects (situation on page 68 of the dissertation, table 1.6-is also clearly expressed.)

We analyzed what subjects use ICT “more” and what was “never use”. As a result, it became clear that in class VI 7, in class VII 10, in class VIII 13, in class IX 9, in class X 11 and in class XI 13 subjects do not use ICT in the teaching. During the research, it became clear that the same material and technical in district and city schools that have a base, the ICT most used subject is computer science. In general, the problem when analyzing the situation in school practice in terms of the following conclusions were drawn:

- school management does not approach the holding purposefully using ICT and student implementation of the formation of information culture and in an organized manner;
- When subject teachers use ICT as a tool formation of information culture in students organized content, essence, goals and objectives, the right position in the work of delivery in a planned and purposeful manner they do not hold;

- the upper class of the school in the teaching of various subjects without paying attention to the accuracy of the information to students, without providing the correct sources of data collection they do not approach the preparation of student's assignments correctly;

- The use of internet at school, the collection, storage and transmission of informatics have been systematically instilled;
- State educational websites and necessary internet resources available in Azerbaijan are not provided to students;
- Students learn to master the rules of proper use of ICT, honesty while online, online ethics;
- Scientific and pedagogical realization of the theoretical and practical bases of the use of ICT in the learning process as a tool in the formation of information culture of students is neglected;

The first half of the second chapter “Formation of students/ information culture using ICT in the learning process” is entitled “Principles of using ICT in the formation of students information culture”.

When studying the school experience, it is known that students who use ICT in their lessons have a great enthusiasm and interest in learning. It means that ICT provides an incentive for students to learn. A lesson built using ICT is not only interesting, but also allows students to discover new knowledge and skills. Using ICT in the learning process of upper class students studying at school (VI-XI classes) does not mean that they have achieved the formation of information culture. Because even at this very high level, it is not measured by the full reliability of computer equipment. ICT is a tool. We have mentioned in the previous chapters that it is written as a tool in many scientific literature and articles. It is the need of the hour to take proper and planned measures to solve the issue of the influence of those equipments on the information culture of the students. Because in the world experience, we have seen the good sides of ICT, as well as its consequences, and it is a proof that we are aware of all the happenings right away. Information spreads quickly, the student becomes very knowledgeable. In this information space, the student chooses what he needs, what is suitable and worthy for him, and receives spiritual nourishment from it. This shows the influence of each student on the formation of information culture through the use of ICT as a tool. Students participate in the modernizing society more willingly than their parents.

From the surveys conducted during our research, it became clear that almost all of our students are computer users and residents of the Internet world. The analysis of surveys conducted among school management, deputy directors, psychologists and teachers showed that working with information in the direction of using ICT and forming information culture in students, analyzing them, transferring them to others, etc. much needed work has not been done in order to develop such habits in the right direction.

During the analysis of the results of the research, it was concluded that the school and the family have a very big role in forming the information culture of students by using ICT in the learning process. It is known that it is impossible to solve this problem without parent-teacher-school unity and cooperation. Conversations with school principals, deputy principals, teachers and psychologists showed that most parents are not with their children when they use the computer. Additionally, they stated that they needed to be educated about this problem.

In the teaching of subjects in schools, they do not use ICT enough, and their great potential in classes with such equipment, for the purpose of forming the information culture of students. The reason for this was explained by the lack of development of any methodology for the use of ICT in school practice as a means of forming the information culture of students. Another reason is that all schools are still moderately equipped with ICT equipment, teachers' computer skills are low and they are not aware of Internet programs with wide pedagogical possibilities. In modern conditions, the lack of additional methodical recommendations for teachers to use and the lack of materials also increase the problem.

This chapter of the dissertation clarifies the theoretical and practical issues of the formation of students/ information culture in the application of ICT as a tool. In this case, the principles of affective use of ICT as a tool were identified in order to form an information culture in students;

The principles that form the basis of information culture are as follows!

1. Taking into account the features of globalization in the formation of information culture in students.
2. Constant monitoring of high-speed development of technologies.
3. Selection of age-appropriate software.
4. High self-esteem.
5. Individual approach.
6. Respect and morality.
7. Consistency and systematicity.
8. Activity.
9. Accuracy of information reception.
10. Cooperation in the information environment

The second half of the second chapter is called

“Preliminary pedagogical conditions for the use of ICT in the formation of students/information culture”. In this sub-chapter, the initial pedagogical conditions for the formation of information culture in students are clarified, the work done and explanations of new concepts that will be important in this direction are given. The main pedagogical conditions for the use of ICT in the formation of information culture in students are as follows;

- Moderate provision of ICT equipment;
- About having the necessary knowledge, skills and habits in ICT;
- Getting of moral values;
- Creation of tendencies and interests that ensure intellectual development;
- follow online ethics rules;

The dissertation provides examples of some of the most commonly used internet services in the learning process and their pedagogical capabilities. The chapter deals with the rules of conduct on the internet, online ethics, netiquette, netizen terms.

The third half of the second chapter is entitled “Pedagogical opportunities for students to use ICT in the formation of information culture”. In this sub-chapter, along with ICT equipment in local and foreign schools, the pedagogical possibilities of the formation of information culture during their use are clarified. These are as follows;

- Improving the skills of searching for information on the Internet;

- Emergence of new knowledge, skills and habits when using Internet resources;

- Formation of modernity in teachers/ methodological activity;

- Development of new and modern didactic tools;

- Enriching the existing gap in the teaching of subjects with materials of internet to students.

The fourth half of the second chapter is entitled

“Ways to use ICT in the formation of students information culture”. This subchapter identifies ways to shape students/ information culture using ICT.

- Students use ICT equipment to search the Internet where appropriate when conducting research;

- To avoid false/ information, to have the ability to check The reliability of the information They find on the Internet;

- They are critical of the available information and determine what they need;

The result of the conducted research has once again confirmed the idea that the use of ICT in the learning process is a tool in the process of forming the information culture of students. It was concluded that learning and teaching become more comfortable, convenient and interesting when ICT is used purposefully, systematically and continuously in the educational process in general education schools, and in ensuring the cognitive activity of students, in acquiring knowledge in various subjects, the level of logical thinking, the level of knowledge is real. It plays an important role in increasing the number of students, in revealing the formation of an information cultured student, in the correct establishment of teacher-student

relations, and in improving the quality of education. Therefore, it is considered appropriate for teachers to systematically and consistently work on this problem, both during the training process and outside of class.

The results of the study are summarized as follows;

1. During the research, it was concluded that the concept of culture, which is generally the main aspect in the formation of personality and acts as its special quality indicator, acts as one of the important attributes of development by being processed in both a philosophical and sociological context, more about it thoughts are expressed on the scale. Culture has a more general meaning, consisting of a general set of moral and spiritual qualities (speech culture, thinking culture, aesthetic culture, physical culture, ecological culture, etc.). Information culture, which is more characteristic of the modern world, is included in these meanings. In the current conditions, the information culture of a new person appears as a necessary condition in the global world. In this sense, education is important as a decisive stage in the fulfillment of such a task. Examining the formation of information culture as a special pedagogical issue makes it necessary to study it as a separate pedagogical concept. As a result of the research, it is possible to conclude that the formation of information culture is essentially the ability to use ICT, ensuring its completeness and availability when working with information, protecting its confidentiality, observing legal and ethical norms, searching and selecting information, combines aspects such as a set of knowledge, skills and habits aimed at storing, transmitting and analyzing, meeting the information needs of professional fields of activity.

2. The formation of an information culture has emerged as an important pedagogical problem at time when information is increasing, which has necessitated the need for relevant research.

During the research, scientific-pedagogical and psychological sources were studied in terms of the problem, and it became known that certain researches related to philosophy and sociology related to information culture were conducted.

At the same time, some considerations were made on the formation of an information culture. However, this problem has not been studied as a specific pedagogical issue.

3. The situation in the school practice related to the formation of information culture has been studied in several directions and it has been found that students have difficulty working with information in the learning process. They do not have the necessary skills to search for the necessary information and generalize it. Teachers surveyed perceived the formation of an information culture as a lack of knowledge on the part of students.

4. The main conditions for the formation of students/ information culture using ICT in the learning process were studied role in the more effective organization of this work. During the study

They are identified as follows;

- Proper establishment of school-family relations;
- Formation of a new culture using ICT;

5. The following pedagogical principles of the formation of students/information culture using ICT have been identified;

- Taking into account the features of globalization in the formation of information culture in students;

- Constant monitoring of high-speed development of technologies.

- Selection of age-appropriate software.

- High self-esteem.

- Individual approach.

- Respect and morality.

- Consistency and systematicity; activity;

- Accuracy of information reception;

- Cooperation in the information environment.

6. In the dissertation, the concept of information culture was considered as a new ethical word, as a mechanism of psychological regulation of students' activity and a moral feeling, and the conditions for the formation of information culture during the use of ICT

in the educational process and the pedagogical possibilities of Internet software for increasing its efficiency were determined:

- Improving the skills of searching for information on the Internet;
- Emergence of new knowledge, skills and habits when using internet resources;
- Formation of modernity in teachers/ met methodological activity;
- Development of new and modern didactic tools;
- Enriching the existing gap in the teaching of subjects with materials of internet to students

7. It is important to identify ways to form an information culture of students using ICT in secondary schools in accordance with the initial pedagogical conditions and opportunities.

The dissertation also works in this direction and substantiates the importance of the following ways.

- Students use ICT equipment to search the Internet where appropriate when conducting research;
- To avoid false information, to have the ability to check the reliability of the information they find on the Internet;
- They are critical of the available information and determine what they need.

Criteria that can check whether the information is reliable (time of launch, purpose of creation, regular updating of information, whether the links on the site are working, whether there is feedback for users, whether there is information about the creative staff of the site, etc) leads to the formation of the ability to do;

8. The practical use of modern Web tools that can demonstrate the importance of mastering topics using ICT in extracurricular at school, extracurricular activities, and the creation of new forms of culture has been studied and a list of information about them has been developed and tested. An integrative lesson has been developed that meets the requirements of new educational programs (curricula),

the use of ICT tools, and is substantiated as a form of research that affects the effectiveness of training.

9. Concepts of ethics, etiquette and netiquette, such as modern information and communication, technologies have been studied, their characteristics have been studied in terms of the importance of training, and proposals have been prepared that that are considered useful for the modern school.

The following research suggestions are:

- Improving the creation of officially affective and important subject sites for the organization of work formation of information culture in students while using ICT in the learning process, collecting and placing the necessary software and WEB tools in a single database;

- Conducting and trainings seminars with students studying in secondary school in the classroom and on the Internet to increase the formation of information cultures on a regular basis;

- Add information on the rule of proper use of ICT and the Internet (10 golden rules) to each of all subject textbooks or student diaries;

- Development of new lesson models using ICT that will allow teachers-students-parents to participate together in social networks;

- To learn to see the world through the prism of different ideas, to form the ability to choose the most accurate information with the help of various resources that can lead to positive behavior of students on the Internet and the preparation of educational programmer.

The main content and provisions of the dissertation are reflected in the published works of the author named below:

1. ICT and information culture in education: Methodological tools. / Baku: ADPU, 2016, 114 p.

2. Application of modern teaching methods and new pedagogical technologies // “Ways to improve the quality of teaching in secondary general education schools in modern conditions” dedicated to the 90th anniversary of BSU methodological conference, Baku, 2009, p. 121-123

3. Teachers should create a revolution in teaching lessons // Electronic Education magazine, November, 2009, p. 27-28
4. Educators should make fundamental changes in education // Education Azerbaijan journal, Special edition, 2009, p. 30-31
5. Features of the application of ICT in the sphere of education in Azerbaijan // “Information and communication technologies in education” III regional scientific-practical conference with international participation, May 14-15, Yekaterinburg, 2009, p. 59-63
6. Active application of ICT in the educational sphere of Azerbaijan // Materials of the 4th international correspondence scientific-practical conference, Ulyanovsk Region Ministry of Education, Ulyanovsk Institute of Training and Specialization of Education Workers, October 14, Ulyanovsk, 2009, c. 408-410
7. Importance of using international educational websites in teaching // Curriculum, 2010, No. 1, p. 66-69
8. Curriculum as one of the progressive educational models of Azerbaijan // Proceedings of the 5th international correspondence scientific-practical conference, Ulyanovsk Institute of Specialization and Retraining of Educational Workers, Ulyanovsk, 2010, October 14, p. 285-291
9. Application of modern educational methods and latest pedagogical technologies // All-Russian Scientific-Practical Conference, Collection of Articles New Generation Standards: implementation of competency-based approach at different levels of education, Saratov, 2011, April 1, p. 174-177
10. Using the Kurikulum.az portal // Kurikulum, 2012, No. 2, p. 99-101
11. Social services for teachers. The most popular Internet resources for education / Book. Baku: East-West, 2012, p. 160
12. The role of the teacher in the formation of knowledge culture in education using information and communication technologies in the pedagogical process // CICE 2013, “Innovations and Challenges in Education” international conference, April. 26-28, 2013, Turkey, Kütahya city, p. 93-94

13. The Role of the Teacher in Creating Knowledge Culture in Education Using Information and Communication Technologies in the Pedagogical Process // Hacettepe University, Faculty of Education Beytepe Campus, New Trends in Teacher Education International Symposium, May 9-11, 2013, Ankara, Turkey, p. 30-31

14. Formation of information culture in students // Curriculum, 2013, No. 4, p. 79-81

15. Formation of information culture among students in the information society // Azerbaijan school, 2013, No. 6, p. 94-100

16. The role of the teacher in the formation of information culture in education using ICT in the pedagogical process // Materials of the international scientific conference on “Pedagogical-psychological problems of improving the educational process”, Nakhchivan, 2013, p. 106-109

17. Modern educational methods and application of the latest pedagogical technologies // XVII international scientific-practical conference on “Modern problems of humanitarian and natural sciences”, Russia, December 25-26, 2013, c. 397-400

18. The role of the teacher in the formation of information culture in students who use ICT in the pedagogical process // International conference on “Actual problems of mathematics and informatics” dedicated to the 90th anniversary of the birth of Heydar Aliyev, organized by the Institute of Mechanics and Mathematics of the Azerbaijan National Academy of Sciences (ANAS), May 29-31, 2013, p. 305-306

19. The role of Azerbaijani teachers in the formation of students' information culture // International Conference European Science and Technology” VI international scientific-practical conference, December 27-28, 2013, Germany, Munich, p. 34-37

20. Formation of information culture of students in the information society // IV international scientific-practical conference “Science, technology and higher education” held in Canada, January 30, 2014, Canada, Westwood, volume 2, p. 64-168

21. Heydar Aliyev as the founder of ICT application in Azerbaijan's information society May 7, 2014, p. 245-248
22. The role of ICT at the professional level of teachers // Moscow and Troitsk, Russia, June 25-26 XXV International conference on “Application of new technologies to education”. 2014, Russia, Moscow, Troitsk, p. 406-408
23. Possibilities of ICT application in the pedagogical field // Scientific works of ARTPI, 2014, No. 4, p. 19-24
24. Systems of new technological tools in the formation of information culture // “World without borders: open, distance, electronic education - Moscow ICDE 2014” international conference initiated by the Ministry of Science and Education of the Russian Federation and organized by Moscow State University of Economics, Statistics and Informatics, 25-26 September 2014, Russia // Moscow, p. 13-14
25. The system of new technology tools in the formation of information culture // International conference “World without borders: open, distance, electronic education - Moscow ICDE 2014” initiated by the Ministry of Science and Education of the Russian Federation and organized by Moscow State University of Economics, Statistics and Informatics, 25-26 September 2014, Russia/Moscow, p. 163-171
26. The role of the teacher in the formation of information culture in students who use ICT // “Modern problems of teacher training: technology, education and development”III international scientific conference, May 22-24, 2014, p. 199-200
27. Forming the culture of using ICT among students as one of the main requirements of the modern era // “XIX Doctoral students and young researchers” national scientific conference, April 7-8, 2015, p. 214-217
28. ICT as one of the indicators of competence in the career development of teachers // V international conference on “Policy and problems of teacher training” dedicated to the 92nd anniversary of

the birth of the National Leader of the Azerbaijani people Heydar Aliyev. April 30-May 2, 2015, p. 422-425

29. Pedagogical principles of formation of information culture of students using ICT in the training process // "Philology and Pedagogy" international journal of Qafqaz University, vol. 3, No. 2, 2015, p. 211-217

30. ICT and information culture in education // "ICT in education", 2015, No. 4, p. 135-141

31. Practical ways of forming information culture in students using ICT // Scientific news of Ganja State University, 2015, No. 3, p. 276-281

32. The role of ICT in the formation of information culture of schoolchildren in Azerbaijan // "Issues of Internet education" online scientific and practical journal, Electronic resource, No. 135, 2016, Russia, [http://vio.uchim.info /Vio_135/cd_site/articles/art_2_7 .htm](http://vio.uchim.info/Vio_135/cd_site/articles/art_2_7.htm), p. 1-8

33. Current possibilities of formation of students' information culture using ICT in Azerbaijani schools. 2016, Kazakhstan / Almaty, p. 96-101

34. Pedagogical ways of forming students' information culture using ICT // ICT in Education, 2016, No. 3, p. 3-12

35. The role of the Internet and information communication technologies in the formation of the information culture of school children in Azerbaijan // Journal of the collection of scientific works of the Pedagogical Institute of the National Academy of Pedagogical Sciences of Ukraine Problems of modern textbooks. , No. 16, 2016, Ukraine-Kiev, c. 433-444

36. On the formation of students' information culture // Azerbaijan school, 2016, No. 5, p. 96-102

37. The role of Internet resources in the process of formation of information culture among students // Scientific works of ARTPI, 2016, No. 4, p. 236-243

38. On the formation of information culture among students // XXI national scientific conference of doctoral students and young researchers, October 24-25, 2017, p. 275-277

39. The effect of the synergistic approach in pedagogy on the formation of information culture in students / ADPU, “Synergistic approach to pedagogical personnel training” republican scientific-practical conference, 2018

40. Information culture is an important part of our general culture // Scientific-methodical magazine of Russia “Scientific-methodical work in educational institutions”, 2018, No. 2, p. 46-52

41. The formation of information culture is a process leading to high cultural development // Republican conference dedicated to the 95th anniversary of the birth of the National Leader on “Teacher training as one of the strategic goals” People of Azerbaijan, Heydar Aliyev, “Scientific Works” magazine of ARTI, May 18 2018, pp. 161-163.

42. Formation of information culture among schoolchildren // Scientific works of ARTPI, 2020, No. 2, p. 20-24.

43. Digital skills are the foundation of information culture // Scientific works of ARTPI, 2023, No. 3, p. 116-119.

The defense of the dissertation will be held at the meeting of the FD 2.15 Dissertation Council operating under the Azerbaijan State Pedagogical University on 29 January 2024 at 12.00 p.m.

Address: Baku, Az1000, Uzeyir Hajibeyli street, 68.

The dissertation can be got to be acquainted in the Library Information Center of the Azerbaijan State Pedagogical University.

On-line versions of dissertation and abstract are posted in official website of the Azerbaijan State Pedagogical University.

Abstract was sent to the required addresses on 27 December 2024.

Signed for publication:
Paper format: 60x84
Volume: 31611
Circulation: 20