Research Article

The Role of Digital Technologies in Independent Study of Philological Subjects

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ARTICLE INFO	ABSTRACT
	Introduction: At present the great attention for developing skills on the independent study of philological sciences in Uzbekistan using digital technologies in the educational process. **Objectives**: Creation of the independent education skills on students in studying philological subjects using digital technologies is important task of modern education system. The article discusses the nature, structure, and content of philological sciences and the unique opportunities for the purposeful development of independent thinking and working skills. It highlights the role of digital technologies in improving student's knowledge and skills, the experience of foreign countries in this regard, ways of organizing expressive reading and speech culture classes using digital technologies, and the alignment of newly forming competencies with the proposed educational tools. **Methods**: The nature of the philological subjects, structure and existence of individual peculiar possibilities on independent thinking and independent working skills, role of the digital technologies in developing knowledge and qualifications of pupils, foreign experiences, shapes of beautiful reading and speaking lessons using the digital technologies, accordance them with the proposing educational devices have been revealed. **Results**: We defined 11 parts of basic competitions of organization of independent education. Activity of students to the following independent knowledges of independent learning are directed: teaching the independent education shape in the extracurricular activities (in experience groups equals 61,7%, in control is 56,4%), pay attention to thinking activity in the language learning process (in experience groups equals 58,2%, in control is 52,5%); working with the latest references (in experience groups equals 32,7%, in control is 23,6%). Based on the obtained information we gave students the target tasks for learning the main competitions. The lessons in control have been carried out in traditional shape taking into account of students. As the experience groups we carried out lessons systematically using the effective forms of educational process and interactive educational methods. In these lessons we payed attention to development and control of independent art activity skills in the educational process: facultative course program on the independent works of students; plan of independent learning, organization of independent study (projection method, autonomic reaching et al.). In order to obtain the trust and exact results we have carried out the final controls in the test form after each stage of experiences. As test's results showed the independent education skills on future specialists have been developed after developing and controlling the independent educational activity.

Conclusions: The possibilities of all subjects by creating skills and qualifications on independent thinking students are different. Between subjects the philological ones have special separated possibilities on nature, structure and meaning, development of independent thinking and independent working skills. Development of independent thinking reflects to independent choice of task and mastering the new knowledges in creative activity process and using ones to other new situations. Teaching of students to creativity allows to construct the independent thinking and organize initial base of independent working skills. Training solve of problematic tasks provides creating in students of independence, knowledge activity, generalization, concluding skills. Introducing creativity to the educational process leads to creation and development of independent thinking, allows to combining the educational and scientific activity. In result this procedure increases the efficiency of teaching on philological subjects to universities students. Using digital technologies is effective criterium for independent thinking, creating independent working skills and increasing interests to subject on students. Moreover, the digital technologies create possibility for creating developing skills as analyze, connect, generalize and definition.

Keywords: skills, independent study, educational technology, beautiful reading, digital technology, educational progress.

INTRODUCTION

As known that development of mechanisms for integration science and production, its practical implementation, individualization of study, independent study and also production the distance educational system's technology, its devices, mastering, creation of modern educational and information system's technology, implementation to philologic educational system in the world level is the actual task. This serves for modernization of the having pedagogic processes, development it according with the modern requirements, for example, mastering the modern pedagogic and information technologies, modernization of philologic educational medium based independent and distance educational system's technologies.

The based scientific theoretical opinions directed for teaching students of universities as the comprehensive human and developed specialists by many scientists had been noted. For example, in paper [1] had been constated that development of informatization of education occurs under the influence of large-scale penetration of digital technologies into all spheres of modern society. Considering this influence, it becomes important to identify and take into account the current level of digital literacy of future teachers and, based on its analysis, develop a scientific and methodological justification for determining the structure and content of the discipline destined for preparing future teachers to work in the context of digital transformation of education.

Author of paper [2] had analyzed the topic of this study in the current pedagogical scientific and methodological context, which is due to the ongoing digitization processes in the Russian education system. The purpose of the article was to analyze, systematize and transfer experience of implementing a digital educational resource in the process of mastering by first-year students a philological discipline with a cultural orientation.

In paper [3] had been presented a competence model of the "end-to-end" and "artificial intelligence" technologies courses. The course focuses on the development of school teachers' and university professors' personal competencies as well as their basic and professional digital competencies in the process of professional retraining within the framework of the digital transformation in economy and education program in the Russia. The article treated the peculiarities of the formation of these competencies in the conditions of digital transformation in education. Authors of paper [4] had studied the task related to invariant approaches to student's independent work in the process of studying general education subjects. These approaches were aimed at creating an effective and motivating educational environment that promotes the development of independent learning skills. There had been constated that the educational process can no longer be considered without using a variety of innovative technologies, digital services, resources and platforms for learning.

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In paper [5] had been noted that a clearly structured system of classes and tasks aimed at developing research competencies gives good results. Senior students claim that the developed skills of preparing a bibliographic list helped them in their work on abstracts, term papers, and publications. Most of them conduct research activities, participate in conferences, have published abstracts, about half have left or clarified the topic chosen in the first course. The rest of the students completely changed the direction of their research activities. Author of paper [6] the tasks and stages of formation of competitions of foreign business communication had been presented. The possible tasks for master's degree students in law by stages of formation of foreign communicative competition oriented to the independent work had been listed and described.

In other paper [7] the advantages of using multimedia and internet technologies in the educational process – in teaching a foreign (French) language in a non-linguistic university, particular, in organizing students independent work had been described. There the main types of student's independent work, their interaction with the teacher and the global network, presented types of interesting and productive training sessions organized using the internet had been considered. Authors had concluded that it is the safe, at the same time effective and combined training format, combining independence and initiative of students and the coordinating, controlling, mediating role of the lecturer. In paper [8] the prospects for using digital educational resources in the organization of independent work of students had been discussed, where the effectiveness of the influence of digital educational resources on increasing the level of cognitive independence in the study of the discipline "Mechanics and machine parts" had been examined.

Author of paper [9] had considered the advantages of using digital technologies in the educational process as effective instruments on organization of independent work of pupils studying foreign language subject. There the potential of such resources for both teacher and as pupils in the framework of creation total educational medium had been revealed. As known the digitalization allows us to solve the variative, redundancy, levelling and difficulty differentiation of tasks, constructing the individual educational algorithm. Author noted that the digital technologies must be considered only as an additional educational resource. In paper [10] use of digital technologies for student's project work on the topic "Arctic convoys of the Second World War" had been presented, which was too effective and useful in the patriotic education of pupils.

In paper [11] the problem of the formation of the XXI century key competencies in future teachers, as well as the general trends that have developed in the education system in recent years had been analyzed. The problem of the research was determined by the contradictions: between the capabilities of modern digital technologies and the training model and technical capabilities implemented by educational organizations; between the need to provide resources for solving socio-economic problems in the conditions of the fourth industrial revolution and the insufficient level of information literacy of future teachers. The purpose of the study was to describe and justify the information platforms that a modern teacher who has the necessary level of competence in the field of digital technologies in education needs to know. To do this, a comparative analysis of the platforms proposed for study had been carried out, and their potentials for use in the professional sphere had been identified.

Other author [12] had dedicated to the role of digital technologies in formation of motivation to study a foreign language at a university. Studies of Russian and foreign specialists in this field had been analyzed. The paper considered ways of applying digital tools and services to increase the level of educational motivation of students. The author came to the conclusion that digital technologies can potentially become a powerful educational tool aimed not only at increasing interest and motivation in learning a foreign language, but also to a significant extent influence the academic performance.

In paper [13] to substantiating the effectiveness of the use of digital technologies on the example of updating the work program of the discipline "Foreign language" had been devoted. Author analyzed the educational possibilities of digital technologies for teaching the discipline and showed the ways of their application using practical examples. He revealed the correlation of didactic capabilities of digital technologies, types of practical activities used in foreign language classes, and the formed digital skills of students. In other paper [14] to the peculiarities of student's independent work organization in foreign language using digital information technologies at the university had been discussed too. As author noted use of such methods in education helps more rapid and productive formation of language, social-linguistic, communicative competitions speaking foreign language, promotes to the best learning of

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studying material, broadening horizons, creating new professional competitions and skills working with digital educational resources.

OBJECTIVES

In the present paper the nature of the philological subjects, structure and existence of individual peculiar possibilities on independent thinking and independent working skills, role of the digital technologies in developing knowledge and qualifications of pupils, foreign experiences, shapes of beautiful reading and speaking lessons using the digital technologies, accordance them with the proposing educational devices have been revealed.

The observations, working experiences and analysis carried out in the present educational system are showing that the great attention to the independent education is paid because of the reforms in philological education are realizing, the broad activities on searching and implementation of the optimal and new ways for reaching of the main aim of education are leading. Today we can't represent the efficiency of educational process without the digital technologies and several investigations on this process are leading.

Development of information and communication technologies in XXI century is leading in all branches of society. For example, on "Beautiful reading and speaking culture" subject included to the philological specialties of universities studying plan, improvement of the education quality based on the modern conditions is required.

In this context on teach of the speaking culture learn and implementation to educational process of using in world experience "Experiential learning" and "Project" methods are one of the important tasks of Uzbekistan educational system. The role of the digital technologies, in particularly, information communication technologies and graphical applications in the developing process of knowledge and qualifications of students on the beautiful reading theme of "Speaking culture" subject is important. Materials in the multimedium format created using the digital technologies too useful in the educational system because of they can represent correctly sound and figures, create special effects for the deep perception of information and have possibilities for presenting wide visual information.

Using computer in the lesson increases the activity of both subjects, that are teacher and student, provides individuality of education. In result, development of student's personality is encouraged, his independence in making decision, initiative and assurance to doing tasks are increasing. The feedback between teacher and student in the educational process is increasing significantly. This is important criterium for pedagogical activity. In carried out investigations we studied experiences on using digital technologies in the "Speaking culture" education system of foreign countries, for example, Finlandia and South Korea. In Finlandia experiences we sighted that attention to the digital technologies is directed to two tasks:

– firstly, to help for developing competitions of students dealing with the programming, data analyze, design and technologies;

– secondly, to support pedagogical diligence giving useful results in results using devices which increase possibilities free using information and efficiency.

As to Korea, this country began use information communication technologies in the educational system in 2005 and one thinks that the digital technologies are one of the basic devices for developing education. As world experience showed that using the digital technologies in teaching deal with speaking culture, oratory and art subjects helps to students not only for increasing interests for these subjects, but also creating philosophy, logical thinking. Effective using the digital technologies provides independent searching, finding within in short time necessary information, creating possibilities as exchange of views between teacher and student and development of independent knowledge on students.

METHODS

We consider lessons on the beautiful reading and speaking culture where one organizes them using the digital technologies in the following directions:

– lessons organized with multimedia devices (there is one computer in classroom, teacher uses it as the electronic blackboard);

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– lessons having possibilities to enter to world internet set (this lesson can be organized both as multimedia and as computer);

– lesson organized with computer (these lessons using several computers are providing and usual in computer classroom).

The teaching "beautiful reading and speaking" subject is being developed daily and its activity circle is being expanded. The new devices, methods and materials in educational process are being integrated. Using in this process of digital technologies serves for increasing the lesson quality and allows to obtain the essential information in the short time duration. In this context we must take into account of features of the digital technologies too. The digital technologies include all electron devices, automatic systems, technological devices and resources producing and saving information.

It should be noted on experiences analyzed and used widely world practices that the different devices by integration of digital technologies in the educational process dealing with the develop speaking are used. Based on the theirs features we selected to the raster graphics, vector graphics, video program and interactive types. Moreover, in construction skills of students on the working with the digital technologies the studying materials the teaching clocks on speaking culture subject taking into account the possibilities of working with digital technologies to two groups, namely, the interactive devices destined for using in the theoretical lessons and graphical applications for practical implementations can be divided.

On the assumption of possibilities in classrooms the first materials can be divided to three types:

– online interactive programs;

– offline interactive studying devices;

– hybrid studying devices.

The last group materials we divided to three types too:

– raster graphical programs;

– vector graphical programs;

– three dimensions graphical programs.

Based on the having studying program in the independent education process realization of creation on students of XXI century skills using the digital technologies in the following consistency is advisable:

Integration of the digital technologies to the beautiful reading and speaking subject lessons is criterium for constructing competitions on students not only showed in the having educational standards but and also in the world requirements competitions. In this context in order to consequence organize we must provide student with need educational device.

Systematization of the digital technologies in the speaking and speaking culture lessons is important in educational process for organizing the intended purposes and required competitions. The digital technologies are too broad, systematization them helps to student to choose the required technology system. In order to extend the practical skills of students according with the modern lessons and theoretical knowledge on speaking culture we must integrate lessons as traditional digital shapes through new tract on the beautiful reading and speaking educational process, bring into compliance its meaning to modern requirements and enrichment studying materials with the digital devices. For creating the digital skills of students, systematization of studying materials on speaking culture lessons, including imitation through computer of the digital working shapes as computer graphics, digital figures, photography and demonstrations are required. Organization the correctly studying process, in our opinion, can be realized through lean of following principles:

– principle of reaching devices for studying artistic-creative activity;
– creative educational principle having many art characters;

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– increasing principle of interactive role of user of computer programs in the educational process through control of art information;

– submission principle to the studying-art-creative medium.

RESULTS

In Table 1 we presented conformity of having new creating competitions by "Beautiful reading and speaking culture" subject on students to educational devices when we use the digital technologies.

Table 1

Conformity of having new creating competitions by "Beautiful reading and speaking culture" subject on students to educational devices when we use the digital technologies

The lesson shape is seminar			
Title of lesson	Computer application	Having competitions of "Beautiful reading and speaking culture" subject's program	New creating competitions
First title: beautiful reading of poem at the perfect rhyme **Second title:** beautiful reading of poem at the internal rhyme **third title:** beautiful reading of poem at the free rhyme	Web sites E-books Presentations Virtual reality Adobe Illustrator; 3DMax.	beautiful reading of poem at the perfect rhyme; - beautiful reading of poem at the internal rhyme; - beautiful reading of poem at the free rhyme;	- correct pronunciation of words; - the ability to engage the audience's attention; - working with digital technologies; - critical thinking; - reveal the difference between finger, rhymed and unrhymed poems; - learn of education; - reproduction of knowledge and information; - creative thinking; - aesthetic feeling; - visual feeling; - competitions dealing with the national culture; - increase of the speaking effect.

As we can see in Table that integration of the digital technologies to beautiful reading and speaking culture lessons is the criterium for constructing on students not only competitions having in the educational standards, but and also ones based on world requirements. Construction of XXI century skills on students can be reached through intensive development of skills on design of using the digital technologies in educational process on the speak increasing, projection based digital teaching principles of the theoretical, practical and online lessons and organization them based on the experience educational theory.

Based on recommendations mentioned above at the beginning of carried out experiment we defined 11 parts of basic competitions of organization of independent education (see, Table 2). Activity of students to the following independent knowledges of independent learning are directed: teaching the independent education shape in the extracurricular activities (in experience groups equals 61,7%, in control is 56,4%), pay attention to thinking activity in the language learning process (in experience groups equals 58,2%, in control is 52,5%); working with the latest

references (in experience groups equals 32,7%, in control is 23,6%). Based on the obtained information we gave students the target tasks for learning the main competitions.

The lessons in control have been carried out in traditional shape taking into account of students. As the experience groups we carried out lessons systematically using the effective forms of educational process and interactive educational methods. In these lessons we payed attention to development and control of independent art activity skills in the educational process: facultative course program on the independent works of students; plan of independent learning, organization of independent study (projection method, autonomic reaching et al.). In order to obtain the trust and exact results we have carried out the final controls in the test form after each stage of experiences. As test's results showed the independent education skills on future specialists have been developed after developing and controlling the independent educational activity.

Table 2
Developing degrees of competitions of independent education of futurer specialists (%) (after experiences)

Units of independent education	After experiences	
	Experiences groups	Control groups
1. development of speaking activity	87,2	58,5
2. independent education	56,4	25,5
3. development of independent education in the practical lessons	52,7	51,0
4. development of independent education in the extracurricular activity	85,5	63,6
5.analysis of literature information	56,4	34,5
6. methods of logical reproduction of text, method of staging thinking of text. Keywords using when analyse of references.	49,1	27,3
7. using rules of internet information	32,7	21,8
8. teaching techniques to independent education: planning for writing papers and tesises, saving texts of papers and tesises.	38,2	16,4
9. techniques of developing independent education: writing introduction part of lecture, planning for papers and thesis	32,7	14,5
10. techniques of developing independent education: writing of referats and coursework's tasks	61,8	27,3
11. self-control and self-estimation	41,8	29,1

As analysis of independent education meaning in the foreign language lesson showed that teach of students to the independent education makes the positive changes in competitions of future specialists in both as experience and as control groups.

Table 3
Finaling distribution on the developing degree of independent educational skills of future specialists (%)

Groups	Degree of readiness					
	Before experience			After experience		
	high	medium	low	high	medium	low
Experience groups	18,3	41,7	40,0	38,3	61,7	-
Control	21,9	52,5	25,6	28,8	56,4	14,8

We can see from the Table that the knowledge, skills and competitions of students in the experience's groups are essential better than obtained in the control groups.

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It should be noted that the possibility using the digital technologies in the philological lessons has special excels with the continuing independent works. Construction of independent activity on the philological education in students have been realized in the both as lesson process and as extracurricular activity. This situation provides continuous of the educational system.

Moreover, in order to growing interests of students to the philological subjects, constructing and developing independent activity definition ways and methods using didactic games, crosswords, giving required recommendations are advisable, which, in our opinion, of course, will give own contribution to the construction of independent learning skills on students.

DISCUSSION

The possibilities of all subjects by creating skills and qualifications on independent thinking students are different. Between subjects the philological ones have special separated possibilities on nature, structure and meaning, development of independent thinking and independent working skills. Development of independent thinking reflects to independent choice of task and mastering the new knowledges in creative activity process and using ones to other new situations. Teaching of students to creativity allows to construct the independent thinking and organize initial base of independent working skills. Training solve of problematic tasks provides creating in students of independence, knowledge activity, generalization, concluding skills. Introducing creativity to the educational process leads to creation and development of independent thinking, allows to combining the educational and scientific activity. In result this procedure increases the efficiency of teaching on philological subjects to universities students. Using digital technologies is effective criterium for independent thinking, creating independent working skills and increasing interests to subject on students. Moreover, the digital technologies create possibility for creating developing skills as analyze, connect, generalize and definition.

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