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INFORMATION AND DIGITAL TECHNOLOGIES USED IN TEACHING HISTORY: FEATURES AND ADVANTAGES

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Abstract. Today, information and digital technologies have become fundamental tools in all fields of education. Their systematic exploration is necessary to make their use effective in teaching history. The purpose of the article is to identify the features and advantages of using information and digital technologies in teaching history based on foreign and local scientific and methodological literature, web resources, creating presentations, and providing recommendations. In order to achieve the research goal, the specificity of teaching the subject “History of Kazakhstan” and digitization has been identified, and a study of information and digital technologies used as a tool in historical education has been conducted. Based on the usage by educators and learners, presentations were made regarding the limitations that must be taken into account and the distinctive features and advantages of each technology were analyzed. The scientific results in the article enrich the foundations of teaching in terms of the use of information and digital technologies, making it possible to effectively utilize them in teaching history. The experience in teaching history is examined through scientific literature, allowing for a clear understanding of the effectiveness of methodological works in the designated field.

Keywords: history, education, teaching, informational and digital technologies, teaching tools, internet, learner, teacher, teaching materials

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ТАРИХТЫ ОҚЫТУДА ПАЙДАЛАНЫЛАТЫН АҚПАРАТТЫҚ ЖӘНЕ ЦИФРЛЫҚ ТЕХНОЛОГИЯЛАР: ЕРЕКШЕЛІКТЕРІ МЕН АРТЫҚШЫЛЫҚТАРЫ

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Аннотация. Бүгінде ақпараттық және цифрлық технологиялар білім берудің барлық саласында негізгі құралдардың біріне айналды. Оларды тарихты оқытуда пайдалану нәтижелі болуы үшін әдістемелік зерттей түсуді қажет етіп отыр. Мақаланың мақсаты шетелдік және отандық ғылыми және әдістемелік әдебиеттерді, web сайттарды ғылыми талдау негізінде тарихты оқытуда ақпараттық және цифрлық технологияларды пайдаланудың ерекшеліктері мен артықшылықтарын анықтау, тұжырымдар жасау, ұсыныстар беру. Зерттеудің мақсатына жету барысында еліміздегі «Қазақстан тарихы» пәнін оқытудың және цифрландырудың өзектілігі анықталып, тарихи білім беруде құрал ретінде пайдаланылатын ақпараттық және цифрлық технологияларға талдау жасалды. Оларды оқытушылар мен білім алушылардың қолдануы кезінде назарға алуы керек шектеулер бойынша тұжырымдар жасалды және әрбір технологияның пайдалану ерекшелігі мен артықшылығы қарастырылды. Мақаладағы ғылыми нәтижелер білім беру бағытындағы бастамаларды жаңа қырынан толықтырып, тарихты оқытуда ақпараттық және цифрлық технологияларды тиімді пайдалануды жетілдіретін болады. Тарихты оқытудағы тәжірибені ғылыми әдебиеттер негізінде сараптап талдау, аталған бағыттағы әдістемелік жұмыстардың нәтижелі болуын айқындай түсуге мүмкіндік береді.

Түйін сөздер: тарих, білім беру, оқыту, ақпараттық және цифрлық технологиялар, оқыту құралдары, интернет, білім алушы, оқытушы, оқыту материалдары

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ИНФОРМАЦИОННЫЕ И ЦИФРОВЫЕ ТЕХНОЛОГИИ, ИСПОЛЬЗУЕМЫЕ В ОБУЧЕНИИ ИСТОРИИ: ОСОБЕННОСТИ И ПРЕИМУЩЕСТВА

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Аннотация. Сегодня информационные и цифровые технологии стали одним из основных инструментов во всех сферах образования. Их необходимо изучать методично, чтобы эффективно использовать их в преподавании истории. Цель статьи – на основе научного анализа зарубежной и отечественной научно-методической литературы, веб-сайтов определить особенности и преимущества использования информационных и цифровых технологий в преподавании истории, сделать выводы и дать рекомендации. В процессе достижения цели исследования определена актуальность преподавания и цифровизации предмета «История Казахстана» в стране, а также проанализированы информационные и цифровые технологии, используемые как инструмент исторического образования. Сделаны выводы об ограничениях, которые учителя и студенты должны учитывать при их использовании, а также рассмотрены особенности и преимущества каждой технологии. Научные результаты в статье по-новому дополняют образовательные инициативы и повысят эффективность использования информационных и цифровых технологий в преподавании истории. Анализ опыта преподавания истории на основе научной литературы позволяет выяснить эффективность методических работ в указанном направлении.

Ключевые слова: история, образование, преподавание, информационные и цифровые технологии, средства обучения, Интернет, ученик, учитель, учебные материалы

Статья подготовлена в рамках реализации проекта грантового финансирования Министерства Науки и высшего образования Республики Казахстан «Развитие методики обучения предмета «История Казахстана» будущим учителям истории с использованием информационных и цифровых технологий» (ИРН: АР19679946).

Introduction

The entire spectrum of today's social-economic and socio-political life is being increasingly enriched with informational and digital technologies. Therefore, the relevance

of utilizing the named technologies in our daily activities has reached a contemporary level of necessity. As these informational and digital technologies penetrate deeper into our daily lives, the issue of identifying the peculiarities, advantages, implications, utilization strategies, and even secondary effects of these technologies has become prominent.

In this context, the issues of utilizing informational and digital technologies and tools in the field of education, particularly in the teaching of the subject “History of Kazakhstan,” are gaining significance. This specificity is closely related to the digitization of education in line with social demands and the current pedagogical and methodological requirements for teaching history. The subject “History of Kazakhstan” is one of the fundamental subjects providing objective historical knowledge about the primary stages of development of Kazakhstan from ancient times to the present day.

Today, the subject of “History of Kazakhstan” is taught as a compulsory subject in higher educational institutions in our country. Therefore, it is necessary for students to study the history of Kazakhstan as a mandatory subject, which includes understanding the main stages of development of Kazakhstan’s history, comprehending the events and phenomena of the past, the acceptance of historical facts and events, understanding the common trends of the world historical development of human society, conducting analytical and axiological studies in the study of cultural and historical heritage of Kazakhstan, analyzing the features of internal development of contemporary Kazakhstan objectively and comprehensively, structuring historical facts and events and evaluating them accordingly. In addition, it aims to instill respect for our national cultural values, respect for the cultures of nations living in our country, and to instill in young people a sense of historical consciousness. Therefore, the importance of the methods and technologies of teaching history to the younger generation for the future of our country is extremely high.

The use of visuals in the lesson related to any historical topics contributes to the student’s ability to visualize and imagine the past life. Such illustrative materials have begun to be widely used in modern methodological and scientific literature through informational and digital technologies. However, research on this issue began in the second half of the 20th century and intensified in the 1960s-1970s with the development of the methodology of teaching history by scientists. After the subject of “History of Kazakhstan” became a compulsory subject in the school curriculum in 1990, it became clear that the existing teaching methods did not meet the requirements of teaching the subject. Therefore, solutions to methodological issues of teaching, based on the social-humanitarian significance of the subject, were urgently needed. Now, the scientific works of historians who identify the content of the subject of the History of Kazakhstan, such as M. Kozybaev, Zh. Kasymbayev, K. Nurpeis, M. Koigeldiyev, K.S. Aldazhumanov, B.A. Ayagan, K. Baipakov, and others, as well as the use of academic scientific collections on the history of Kazakhstan, are actively used in practice.

The methodological principles of teaching History of Kazakhstan are perfected by scholars such as E.E. Vyazemsky (Vyazemsky, Strelova, 2003), M.T. Studenikin (Studenikin, 2000), O.Yu. Strelova (Strelova, Vyazemsky, 1999), T. Turligulov (Turligulov, 1998), B. Abdigulova (Abdigulova, 2012), B. Sarsekeev (Sarsekeev, Turligulov, 1996), B.T. Berlibayev (Berlibayev, 2010), A.Sh. Zhurasova (Zhurasova, 2012), F.H. Doppen (Doppen, 2004), P. Hillis (Hillis, 2010), S. Lévesque (Lévesque, 2008), J.A. Taylor, M. Duran (Taylor, Duran 2006), and others, as well as through research and methodological developments.

In addition, dissertations can also contribute to the naming of recent dissertations: In the work titled “New Technologies for Ensuring the Quality and Excellence of Knowledge in the History of Kazakhstan (Cultural History of the Middle Ages)” by G.Zh. Azimbayeva (Azimbayeva, 2007), various opinions and recommendations were expressed on this issue.

However, since the research directions of the named scientific research works differ from each other, it is necessary to study the teaching methods of the subject “History of Kazakhstan” through informational and digital educational tools to develop them further.

It was mentioned above that the subject of history is a subject that forms national consciousness and instills patriotism. Therefore, the importance of the teaching methods used in this subject is significant. The influence of digital transformations and tools that have spread globally and in our country is also evident in many areas, including education. The increase and impact of digital representations and interpretations require the disclosure of facts and truth through clear explanations and the formulation of relevant questions. Studies on the use of digital screens in teaching history have shown a preference for television shows, films, and documentaries. In addition, the wide dissemination of content on the internet and social media has begun to play a significant role in our lives as a source of knowledge. However, there are very few studies on the use and effectiveness of internet-based and social media-based content in teaching history. Research conducted in this direction reveals the potential for university students studying the subject “History of Kazakhstan” to use informational and digital (print and digital) tools in history teaching and research, and identifies their advantages. Furthermore, the advantages and confidence of digital history builders were analyzed in this research. The use of effective and reliable digital documents and tools in teaching history is expected to provide a new perspective on history education.

Research materials and methods

The contributions and experiences of foreign and local scholars, as well as timely published materials, the goals of developing education in Kazakhstan history, the content and methods of educational regulations, and the author’s research and pedagogical experience were utilized in terms of documentary references and citation of sources. Theoretical, philosophical, psychological, pedagogical, and scientific-methodological literature was studied to identify and characterize the current state of the research issue, and analytical methods such as synthesis, generalization, comparison were used.

Results

Researchers integrate elements of educational and digital technology such as tools information tools, test questions, electronic textbooks, case studies, internet-based lesson materials, images, audio, video films, animations, graphs and tables, games, and interactive board elements. However, there are enough people who think that teaching history using new materials, technologies, and tools that go beyond traditional teaching methods is difficult, pointless, expensive, and lacks educational value, and is just for entertainment. Nevertheless, for today’s youth, teaching with the help of informational and digital technologies remains the fundamental method and situation of teaching. Depending on the development features, when students look at our numbers, they gain a different understanding and perception from our perception and experience of the past, and they also form a different worldview and perception. (Prensky, 2011).

We can bring to life technologies that we’ve never had access to before, or make them more affordable, faster, easier, and safer with methods and tools that enable confident and secure operations. Information technology for learning is a broad concept that includes

various technological tools, programs, and methods used to develop the learning environment and activities or to access knowledge. It's worth noting that technology, as perceived, is not limited to tools that can be seen and touched, but rather clarifies our physical worlds. There are three types of measures of technological scope. They are: 1) the objects and tools themselves, 2) the effectiveness and actions facilitated by these tools, and 3) the structured social formations, systems, and regulations. (Lievrouw and Livingstone, 2002). Taken together, technology comprises a set of cultural tools and methods that are passed from one generation to the next. (Goyder, 1997). That is, the tools used in a society and the activities performed using them are a visible manifestation of that society's culture and its development.

Today, in all aspects and areas of education, educational technologies are used: a) supportive tools for learning (tools for acquiring knowledge or delivering it), b) direct teaching aids, (Tondeur and others, 2007) c) educational management (for example, School E), and d) assessment tools. Through the use of various applications in these areas, two main goals have been set. They are:

- Making education and training easy, fast, inexpensive, and accurate;
- Developing the level of technology use in society.

Above, we noted that the concept of information and digital technologies is a broad one; it encompasses various technological tools, equipment, programs, and methods used to enhance the efficiency of education and access to knowledge. More specifically, among these technologies, television, video, radio, projector, telephone, interactive touchscreen, etc., are commonly used. It is important to note that such informational and digital technologies used in teaching history can be characterized as follows.

The quality of development in the field of media and graphic technologies has shown remarkable advancement, impacting modeling, animation, and game design, creating a virtual world that closely resembles reality. Computer and Internet technologies work very fast and the Internet network can access various educational materials such as models, ready-made online presentations, 3D animations, answers to questions, tests in Internet distribution drivers (such as Internet Explorer, Chrome, Firefox, Safari, etc.) without the need to download any programs or files. These teaching materials can be used both in the classroom and beyond its confines. Thus, in implementing the principle of continuity and succession in education, specific stimulating methods of explaining the topic are used.

Although gaming may sometimes be perceived as a waste of time, when computer games are used appropriately, they contribute to effective learning, teaching, understanding, and utilizing knowledge in electronic (digital) formats, as well as in conducting collaborative work, developing critical thinking skills, and forming trial-and-error strategies (Ellis and others. 2006). Furthermore, such games can aid in facilitating genuine learning experiences by immersing learners in situations and contexts related to events, concepts, and circumstances (Selwyn, 2001: 79). Modeling and simulation games offer heuristic opportunities that endorse a constructive learning system for learners (Collins and Halverson, 2009). Computer games intensify interest, motivation, and the desire to learn. In addition to the above-mentioned advantages of the gaming system involving parts of the human body, it can be said that it contributes to the development of eye-coordination and maintaining the body in shape.

Video games can be divided into two categories: special-purpose and general-purpose games. Special-purpose games are designed for specific topics and concepts to be

taught, while general-purpose games are aimed at commercial benefit for the gaming industry. The absence of educational factors in commercial games is noted. However, in the country, the use of games is not considered due to the lack of instructions for effective use of games in historical education, as well as the absence of official permissions.

An interactive whiteboard, connected to a computer and projector, displays the content of a lecture onto a board that reacts to touch. Through the use of an interactive whiteboard:

Provides vivid images;

- Visual aids (such as drawings, graphics, photos, charts, maps, etc.) can be displayed;

- Text annotations can be written on the visual aids;

- Images, videos, and presentations can be shown;

- Access to the internet and display of materials is possible;

- Various applications can be used;

- Created and displayed materials can be saved and revisited;

Materials can be sent to students for learning. (Becta Ict Research, 2003).

The widespread use of interactive whiteboards is showing benefits for both educators and learners:

- It creates an effective learning environment for students who are responsive to various methods of presentation and visual learning;

- It creates an effective learning environment for students interested in diverse perception and visual learning;

- It is clean and harmless, as it does not produce the chalk dust and odor of ink;

- Students can effectively use their time, not wasting it, by taking notes during the lesson;

- With the ability to present materials repeatedly, teachers can also efficiently and productively utilize their time;

- The presented materials are colorful and provide opportunities for using various teaching methods, thereby increasing students' interest and enthusiasm for the lesson.

An electronic book (e-book) refers to books that are read using computers, laptops, tablets, or phones. This includes digital copies of printed books made using scanners or digital cameras for use with electronic equipment. E-books offer several advantages over traditional printed books:

Cost-effectiveness: E-books are often cheaper than printed books because they eliminate the costs associated with paper, ink, printing, and distribution. This can make educational textbooks more affordable, reducing the financial burden on students.

Interactivity: E-books can include not only text but also images, graphics, and multimedia elements, enhancing the learning experience, especially in educational textbooks.

Speed: E-books allow for quick results when transitioning from one topic to another or section, and when searching for specific words.

Portability: Thousands of e-books can be stored and transported on a single device.

Besides being inexpensive and space-saving, E-books also demonstrate their utility as reference materials for original historical sources in history classes. They provide students with the opportunity to evaluate the same event from different perspectives and exam-

ine it from various angles. Thus, the use of audio and visual materials offered by E-books is characterized by the inclusion of original documents in lecture materials, as well as the presentation of historical concepts and phenomena with real evidence. Therefore, it can be said that all these situations increase students' interest in the subject of history.

In the field of history, although the necessary information is provided in textbooks for learners to acquire knowledge through a systematic and structured approach, examining historical periods and events to understand the context and significance requires delving into primary sources and documents, and deriving meaning and significance from these materials. "The compilation of historical materials alone is not sufficient." In order to find answers to questions like "How?" and "Why?" in historical study, learners need to gather and utilize historical evidence and sources, forming the two fundamental principles: 1) the principle of critical thinking, and 2) the principle of utilizing primary historical data. In teaching based on history textbooks, neglecting to give space to the raw data of history hinders learners from practicing the principle of critical thinking. Because, in reality, textbooks primarily provide learners with ready-made knowledge or information, rather than engaging them in activities such as examining evidence, analyzing causes and consequences of events, and evaluating based on their foundations. The development and consolidation of learners' historical and critical thinking skills are contingent upon the integration of historical knowledge obtained from primary sources into the educational system.

The use of the internet as an information retrieval tool in history teaching facilitates easy access to various types of historical primary sources for both educators and learners in a convenient and cost-effective manner. In recent years, documents, books, newspapers, photographs, maps, audio recordings, and films stored in many libraries and archival buildings have become accessible to interested readers and researchers through the Internet. Such data, available on internet, have not only expanded the research capabilities of teachers and students but also facilitated access to documents and data that teachers can actively use in lessons.

Table 1. Examples from foreign and local internet sites used in teaching history.

Local websites	Foreign websites
https://e-history.kz	www.bbc.co.uk/history
http://www.tarih-begalinka.kz/	www.digitalhistory.uh.edu
https://bilimland.kz/kk/subject/qa-zaqstan-tarihy	www.heritage-explorer.co.uk
http://www.cga.kz/index.php?module=ka-zakhstanika	www.schoolhistory.co.uk
https://history-state.kz	http://smarthistory.khanacademy.org
https://adebiportal.kz/	http://teachinghistory.org
https://www.ulitykarhiv.kz/	www.thwt.org (Teaching History with Technology)
http://library.kz/	http://teachmiddleeast.lib.uchicago.edu
http://otr.ar.rightbytes.kz/	www.archives.gov/education
https://kpa.gov.kz/muzej-karlag/	www.loc.gov/teachers
https://nmrk.kz/	www.nationalarchives.gov.uk/education
https://csmrk.kz	www.bl.uk/learning/histcitizen

https://abai-museum.kz	www.naa.gov.au/visit-us/education/resources
http://www.madenimura.kz/	www.collectionscanada.gc.ca/education/sources және т.б.
http://www.iie.kz/	
http://www.archaeolog.kz	
https://www.gylmordasy.kz және т.б.	

Alongside being the broadest source of information, the internet is also evaluated as the most transparent platform regarding ‘information manipulation’ and ‘information distortion.’ (Demircioğlu, 2011). The use of the Internet as a tool for accessing and researching information is also associated with a full awareness of the dangers posed by these large-scale sources of information by both teachers and students. In this regard, learners should be trained to critically evaluate information previously encountered on the internet and in documents and to conduct critical searches on websites, particularly in the field of media literacy.

The following criteria are taken into account in the selection of websites used for educational purposes:

A) Relevance: Information provided should be relevant to the educational purpose and level of the learner in terms of language style and presentation.

B) Authenticity: Information provided should be presented with references to sources and be verifiable for accuracy.

C) Credibility: The website should be prepared by qualified professionals in the field.

D) Objectivity: Attention should be paid to impartial and objective knowledge, avoiding bias and prejudice.

E) Timeliness: Information provided should be current and relevant to new research findings. (Kapoun, 1998).

The reliability and security of a website are determined by how well it aligns with established criteria. In cases where the site lacks such alignment, it may not provide reliable or secure information for users seeking knowledge, as evidenced by instances where sites with terms like “encyclopedia” (like Wikipedia) or “dictionary” (like a translation dictionary) in their names may not necessarily guarantee reliability or safety.

Another significant aspect related to the usage of websites is the availability of resources such as “paper” and “copy-paste” buttons, which may lead students towards ready-made works and plagiarism. Therefore, it is crucial to educate students on academic research methods and ethics. Another burden on educational organizations and teachers in preventing plagiarism of ready-made works is the thorough checking of students’ work.

Although the information that should be provided in history lessons is presented in textbooks and educational materials in a simple and systematic ready-made form at the level of students’ understanding, it is better to see and study historical relics and documents and to understand the importance and significance of the information presented in these relics and documents in order to make them more understandable and digestible.

It is well known that many students perceive history as something boring and disconnected from real life, meant only for memorization. The use of informational and digital technologies in history teaching increases students’ interest in the subject, especially among those who frequently use these technologies in their daily lives and choose them as a means

of learning. Teachers who incorporate informational and digital technologies into their subject note that students' motivation, interest, and participation in class increase. The impact on enhancing interest and motivation also reflects an improvement in students' learning level and academic competence (especially among students who performed poorly in the classical pedagogical tradition).

Information and digital technologies facilitate access to various formats and extensive materials in an effortless manner. This ease of access to extensive materials relieves educators from the burden of adhering strictly to textbooks and historical subject matter during lessons. It enhances students' ability to explore and evaluate extensive materials, thereby enriching the meaning of historical study. Consequently, the possibilities offered by information and digital technologies provoke historical inquiries among students, fostering the development of analytical and critical thinking skills.

Information and digital technologies offer the opportunity to deliver historical data and materials to students in various formats. This diversification enhances students' engagement with the subject, aligning with different teaching models.

Information and digital technologies encourage interaction, collaboration, and cooperative learning. Thus, students not only acquire historical knowledge but also develop collaborative and interactive skills. The integration of innovative technologies also enhances students' connections with others, influencing societal processes positively.

The evolution of a person's knowledge heritage has reached a point where it is no longer feasible for one individual to grasp and retain all the information available. Therefore, the emphasis has shifted from retaining knowledge to learning how to learn to create (Siemens, 2004). Information and digital technologies support individual and active learning. Thus, it not only opens the path to learning for students but also allows them to be motivated to study.

One of the main things not to forget here is that the opportunities and advantages of technological tools and equipment within the realm of information technology knowledge are not realized individually. When utilizing information and digital technologies, the quality of usage is always more important than the quantity of usage. When we say "one smart board per class, one computer per student, quality internet for each educational organization," the figures provided do not reflect our educational goals. Achieving our educational goals is only possible based on educational culture, educational system, and educators conducting the educational process while adhering to necessary procedures and physical infrastructure.

Discussion

The character-oriented education system that has been used for many years has changed to a constructive system. In the constructive education system, teaching and training focus on guiding the learner to take responsibility for their own learning, with achieving informed outcomes as the primary goal. The use of technology in education plays a significant role in fostering inquiry, critical thinking, collaborative work, and media literacy, as well as in developing general skills and various fields of knowledge (such as historical thinking, chronological thinking, comparative analysis, and historical inquiry). Therefore, educators emphasize the use of technology as a fundamental and essential aid in reinforcing the general principles of constructive systems.

The foundational principles that underlie the use of informational and digital technologies in implementing the constructive education system include the following:

- Presenting the authentic version of historical information and events in a structured manner through presentations that have been specifically planned. This enables students to see the connection between the topics they study and real-life situations, including their own lives.

- Engaging students in various assessments of events and concepts, allowing them to critically analyze and contribute to achieving significant results.

- Encouraging active participation of students in the learning process.

- Providing experiential learning opportunities rather than relying solely on theoretical instruction, encouraging students to express their opinions and perspectives in a broad context.

Teachers, in the process of teaching subjects, utilize historical events to visually represent them, accessing audio and visual materials, opening historical documents directly on the Internet, and presenting them to learners. This helps to enrich the true essence of history in the minds of learners, enhancing their understanding of the accuracy, detail, authenticity, and vividness of the material, while also stimulating learners' interest in studying and fostering innovative thinking through modern technologies. Additionally, in order to illustrate historical concepts during the teaching process, teachers may need several historical materials. Consequently, by demonstrating many historical references, teachers not only enhance the content of classroom lessons but also meet the demands placed on the class.

With the assistance of informational and digital technologies, the active engagement of learners in perceiving and comprehending concepts is enhanced. Introducing historical events from the past into the text of the textbook forms a lively learning atmosphere and improves learners' receptivity and comprehension of materials. Learners delve deeper into the topics under study, initiating their own thoughts and creativity. 'Even with limited resources, teachers can achieve good results and accumulate pedagogical experience effectively, enhancing the quality of education, broadening horizons through the prism of tradition, fostering continuous development by embracing new ideas, and improving the quality of teaching (Rudik, 2010).

In traditional education, history lessons were conducted using blackboards and in the form of oral explanations. Therefore, students only accepted historical events from textbooks. This made the teaching of history less effective. Since visual effects are limited, it's difficult to reconstruct the story using only photographs, which may lead to students not understanding the subject. It's clear that the use of informational and digital technologies compensates for this drawback.

The use of informational and digital technologies can contribute to the integration of history lessons into a patriotic and ideological upbringing, as well as teaching and education. During discussions about the struggle for the independence of the Kazakh people, teachers can show specific visual materials. "Historical films help students to vividly perceive and understand military events, to feel the significance of the struggle, and to understand the losses and gains for the people" (Dolliner, 2008).

In teaching history, the use of textbooks, documents, biographies, maps, and illustrations is also important. "In a different situation, presenting events that occurred in a specific historical period to students in an abstract form and explaining them without specific examples can lead to frustration, as well as to the failure to acquire knowledge (Demircioğlu, 2007). Therefore, publishing documents in various digital formats and using documentaries and series can make historical knowledge more accessible.

Studying history with traditional printed books reduces the interest of learners and forms an indifferent attitude towards the subject. The widespread use of digital screens, such as televisions and videos, which provide a virtual presentation in today's society, contributes to the general accumulation of effective tools and methods. Consequently, the significance of visual aids in teaching historical topics becomes evident. Utilizing presentations in historical series films to enhance interest increases understanding of history, influencing the formation of historical consciousness. Thus, incorporating materials from films and serials that depict historical events and phenomena into educational practices contributes to the effectiveness of a lesson. (Arslan, 2008). A person with some familiarity with historical movies and historical events may develop a sense of curiosity. As a result, viewers' interest in acquiring additional knowledge and information related to the historical events depicted in the film is likely to increase. Films serve as useful material for learning about things students may not know about history. For example, after the screening of the film "Oyan Qazaq", one can conclude that there has been an increased interest in the life, creativity, and the "Alash" movement and its activists. People have started to watch more films on similar themes, and book sales have increased.

The use of information and digital technologies significantly facilitates the teaching of history. Appropriate and timely use of drawings, photographs, maps, diagrams, audio-video materials make the topic visual and helps to remember information related to the subject.

Conclusion

Information and digital technologies can be used by teachers as visual tools to provide additional materials and information from various reference sources when teaching a subject. They play a significant role in today's educational and historical teaching processes. The systematic use of modern information and communication technologies in history subjects contributes to the improvement of the level of their application, the increase in labor productivity. Thus, the use of information and communication technologies can enrich the content of historical teaching materials.

In conclusion, the advantages of using information and communication technologies in today's history lessons can be seen in the following aspects:

- Enhancing the learning process with illustrative informational and digital presentations tailored to the topic being studied.
- Providing learning materials in an accessible format.
- Using animated diagrams and presentations to facilitate better understanding of historical information, assisting in the examination of specific aspects of history, contributing to better retention and comprehension of the material.
- Interactive maps enable the observation of historical-geographical characteristics of countries, historical periods, and regional changes in time and space.
- Interactive tests allow for objective assessment based on automated scoring, enabling students to assess their knowledge.

Given the complexity of the research issue and its multidimensionality, as well as its relevance to many areas, scientific research is needed in order to develop innovative methods for providing digital education to students, preparing high school teachers to shape students' information literacy skills, and conducting comprehensive and targeted research.

REFERENCES

- Vyazemskij E.E., Strel'ova O.YU. (2003). *Teoriya i metodika prepodavaniya istorii: uchebnik dlya studentov*

- vysshih uchebnyh zavedenij. — Moskva: Gumanitarnyj izd. centr VLADOS (in Russ.)
- Abdigulova B. (2012). Tarihty okytu teoriyasy men adistemesi. — Almaty: Gylym. (in Kaz.)
- Azimbaeva G.ZH. (2007). Kazakstan tarihyndan bilim sapasy men bilikti zhetildirudegi zhana tekhnologiyalar (orta gasyrlardagy madeniet tarihy). — Almaty. (in Kaz.)
- Arslan, Ö. (2008). İlköğretim 8. sınıf T.C. inkılap tarihi ve Atatürkçülük dersi öğretiminde görsel ve işitsel materyal kullanımının öğrencilerin akademik başarıları ve hatırda tutma düzeyleri üzerindeki etkisi (Yüksek Lisans Tezi) YÖK Tez Merkezi veri tabanından erişildi (Tez No: 230943) (in Turk.)
- Berlibaev B.T. (2010). Kazakstanda tarihi bilimning kalyptasuy men damuy: tarihi–teoriyalyk zertteu. —1920–2001. — Almaty. (in Kaz.)
- Becta Ict Research (2003). What the research says about interactive whiteboards. http://archive.teachfind.com/becta/research.becta.org.uk/upload-dir/downloads/page_documents/research/wrts_whiteboards.pdf (25.04.2024) (in Eng.)
- Collins A., Halverson R. (2009). Rethinking education in the age of technology: the digital revolution and schooling in America. — New York: Techers college press. (in Eng.)
- Doppen F.H. (2004). Beginning social studies teachers' integration of technology in the history classroom. *Theory and Research in Social Education*. — 32(2). — Pp. 248–279. <https://doi.org/10.3390/educsci12070478> (in English)
- Dolliner L. (2008). Akparattyk kommunikaciyaokytu tekhnologiyalarynyng maseleleri zhane bolashagy. *Informatika negizderi*. — №1. — P.10. (in Kaz.)
- Demircioğlu, İ. H. (2007). Tarih Öğretiminde Filmlerin Yeri ve Önemi. *Bilig*. — 3. — Pp. 111–122. (in Turk.)Начало формы
- Demircioğlu İ.H. (2008). Tarih Derslerinde Tarih Web Sitelerinin Eleştirel Bir Bakış Açısıyla İncelenmesi. O. Yaşar (Ed.) Uluslararası Sosyal Bilimler Eğitimi Sempozyumu: Bildiriler — Ankara: Nobel. 320–323. (in Turk.)
- Ellis J., Heppell S., Kirriemuir J., Krotoski A., McFarlane A. (2006). Unlimited learning. Computer and video games in the learning landscape. — London: Entertainment and leisure software publishers association. (in Eng.)
- Goyder (1997). Technology and society: A Canadian perspective. —Toronto: University of Toronto press. (in Eng.)
- Hillis P. (2010). Helping trainee teachers realize the potential of Information and Communication Technology: A case study from Scottish history. *Contemporary Issues in Technology and Teacher Education*. — 10(4). — Pp. 435–456. <https://doi.org/10.1177/2158244020926586> (in Eng.)
- Kapoun J. (1998). Teaching undergrads web evaluation: a guide for library instruction. — CRL News, (July/August 1998). — Pp. 522–523. (in Eng.)
- Lievrouw and Livingstone, (2002). Handbook of New Media: Social shaping and social consequences. — London: Sage. (in Eng.)
- Sarsekeev B., Turlygul T., (1996). Zadaniya dlya samostoyatel'noj raboty po istorii Kazahstana. — Almaty: Ana tili. (in Russ.)
- Strelova O.YU., Vyazemskij E.E. (1999). Kak segodnya prepodavat' istoriyu. — Moskva: Prosveshchenie. (in Russ.)
- Studenikin M.T. (2000). Metodika prepodavaniya istorii v shkole: uchebnik dlya studentov vysshih uchebnyh zavedenij. — Moskva: VLADOS. (in Russ.)
- Selwyn N. (2001). Education and technology: key issues and debates. — New York: continuum. (in Eng.)
- Turlygulov T. (1998). Kazakstan tarihy mektep kursynyng zhane ony okytu adistemesi kalyptasunyng gylymi negizderi. — 1934-1997. —Almaty: Gylym. (in Kaz.)
- Taylor J.A., Duran M. (2006). Teaching social studies with technology: New research on collaborative approaches. *The History Teacher*, 40(1). — Pp. 9–25. (in Eng.)
- Tondeur J., Van Braak J., Valcke M., (2007). Towards a typology of computer use in primary education. *Journal of Computer assisted learning*, — 23. — Pp. 197–206. (in English)
- Prensky M. (2001). Digital natives, digital immigrants. On the Horizon. MCB University Press, (5). — Pp.1–6. (in Eng.)
- Rudik G.A. (2010). «Europalyk bilim beru koordinattaryndagy kazirgi sabak» innovaciyaokytu keshendi zho-basynyng elektrondyk materialdary. Kostonaj: Monreal'. (in Kaz.)
- Zhurasova A.Sh. (2012). Tarihty okytu adistemesi. — Oral: M.Otemisov atyndagy BKMU Redakciyaokytu baspa ortalygy. (in Kaz.)

МАЗМҰНЫ

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