The Reality of Digital Teaching of History in Croatia

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Abstract - **The educational system has traditionally been slow to accept innovations and advances in technology used in everyday life. The high penetration of networking, digitalization, and the use of devices is ordinary daily life in the 21st century. They also have a severe impact on the everyday life of schools. Teaching history has not remained immune to the fruits of the IT revolution. In the Croatian framework, several attempts to reform history teaching must be added, rounded off by the School for Life project and pandemic attempts at online and combined teaching in recent years. The use of digital technologies and adapted methods of teaching history in that period went from indignation followed by individual utopian attempts to broader acceptance of the use of ICT. However, what does this wider acceptance mean for teaching history? In qualitative research using the structured interview method, 11 history teachers (advanced in the profession) were interviewed who, in the initial contact, expressed themselves positively towards the use of digital tools. The results point to possible future directions for the education of history teachers and specific strategies for using digital tools.**

Keywords - the *digital revolution, use of ICT, teaching history*

I. INTRODUCTION

The use of ICT in education and the so-called digital revolution are no longer novelties about which opposed utopian and dystopian works would be written. Fortunately, the first decades of the 21st century are increasingly filled not only with experimentation but also with quality research on the use of ICT in schools. As a result, educational policymakers have accepted ICT not only as a supporting part of the educational system but also as a necessary part of the education of new generations.

Teaching history has not remained immune to the fruits of the IT revolution. In publications and magazines on didactics and methods of teaching history, the use of ICT was shyly mentioned already in the late 1960s and early 1970s. Only at the turn of the century and thanks to the translation of foreign literature did Croatian history teachers receive professional literature that gave instructions and examples of the use of the then-current computer technology and the Internet. Scientific research on history teaching using digital media and tools is rare [1]. In the last twenty years, in Croatian scientific journals covering the topic of history teaching, the application of ICT has only been written about in rare cases. The most significant impetus for using ICT was the COVID-19 pandemic, during which almost all teachers used the available technology in different ways to teach. In the Croatian case and for elementary schools, the already implemented e-School (and School for Life) project, in which all elementary school students received tablets for use, certainly has great merit in the high use of ICT. According to the project plan, free Internet should be available to students in addition to tablets in schools. There is no research or report on the use of tablets, but in communication through teacher groups on social networks, it could be concluded that they are mostly not used or used adequately [2].

One positive development influencing the broader acceptance of digital history teaching is upgrading digital parts of history textbooks from 2019 until today. In that series, all history textbooks, in addition to the usual digitized textbook (usually in PDF format with links to external multimedia content), also received various additional forms of interactivity. Depending on the textbook publisher, additional interactivity is in digital educational objects or digital educational content. *Digital educational objects* vividly display a particular phenomenon in a digital format. *Digital educational content* is didactically-methodically designed units that can be part of a lesson or replace a regular lesson [3]. The new textbooks were issued after the publication of the new History curriculum, which only slightly encourages the use of digital technologies in the recommended teaching methods. It mentions that digital resources (websites, journals, tools, archives, collections, and repositories) can also be used. The new textbooks were issued after the publication of the new History curriculum in 2019, which only slightly encourages the use of digital technologies in the recommended teaching methods. It mentions that digital resources (websites, journals, tools, archives, collections, and repositories) can also be used. It can only be assumed that the authors of the history curriculum relied on the fact that students should acquire part of the ICT skills according to educational expectations Cross-curricular topic "Use of information and communication technology."[2]. The two pandemic years brought more online classes, whether synchronous or asynchronous teaching. Teachers have increased digital communication, and the number of materials passed on to students. Due to the increased Internet use among students, there is also a growing problem with information verification. The problem of spreading false and inaccurate information is certainly contributed by leading statesmen who use fabricated data from the past to strengthen their arguments. There is agreement amongst media commentators that the spread of so-called fake news poses a severe threat to a democratic society. Therefore, history

educators should help stem the rising tide of misinformation. [4] Although the issue of using artificial intelligence is not new in the academic community, school practitioners have only begun to open up the topic. Tools like ChatGPT and Midjourney and even the general issue of artificial intelligence have not yet been mentioned in the official training programs for Croatian history teachers. With remarks about possible abuses in the matter of plagiarism, Chat GPT is perceived mostly positively among early adopters in recent research.[5]

The status of history as a school subject in the countries of the European Union is not uniform, nor is the procedure for acquiring the qualifications of history teachers. Regarding the state of digital teaching in Croatia, examples from other countries can be presented, but they are not comparable. In discussions about the relationship of teachers to technology, a romanticized notion is still used, according to which the new generation of students are digital natives while teachers are digital immigrants. [6] The scientific community warns that the rapid spread of fake news and digital media that transmit historical falsifications shows that the so-called digital natives intuitively use digital technology but lack digital literacy. Recent literature calls this current period post-factual or the era of alternative theories. [7] This challenge of digital literacy also puts increasing pressure on Croatian history teachers. The use of digital technology supports today's prevailing paradigm of constructivist teaching, which, by placing students in the leading role, should contribute to developing critical and historical thinking while expanding digital literacy. [8]

II. RESEARCH

In qualitative research using the structured interview method, 11 history teachers were interviewed (working in elementary and high school). Questionnaire testing was avoided to give respondents more freedom to clarify their work and think about the use of digital technologies. With a questionnaire, the possible answers could be too conditioned by the limitations set by the researcher. Two criteria for selecting respondents were an initially positive attitude towards using digital technology in teaching and professional advancement. The criterion of professional advancement was chosen because it testifies to the professional activity of the respondent. The gender, age of the respondents, and their work experience are not relevant if we consider that advancement in the profession is the primary variable for selecting respondents.

The opening research question to starting the interviews with respondents was: How do you use digital technology in your teaching?

Emphasized follow-up questions were:

- what are the advantages of using digital technology,

- what are the limitations and/or disadvantages of using digital technology,

- do you think that today's generation of students are digital natives who use digital technologies independently and meaningfully,

- in what ways can teachers guide students for the meaningful use of digital technologies in learning history?

The questions were comprehensive to avoid contamination of the answers or influence on the respondents. For example, a possible area of inquiry could have mentioned learning management platforms, 3D models, or augmented or virtual reality. However, such questions could lead the respondents to give possible, desirable answers to show the situation better.

From the collected answers, the following common characteristics and a few outstanding developments can be distinguished.

When answering the initial question, respondents usually began to explain in which part of the teaching process they most often use digital technology. All respondents use computer presentations as a teaching tool for presenting content. This includes presenting new facts and using presentations to ask questions and tasks. A minor part (3) of the respondents expressed a more remarkable ability to use computer presentations with which they create interactive games (such as association, quizzes, puzzles, and gradually discovering graphics). Computer presentations are used in all parts of the lesson - from the introduction through the central part to repetition or even self-evaluation at the end. According to most respondents (9), using other applications, websites, multimedia, simulations, or 3D models depends primarily on the historical topics and content covered in the lesson. When choosing whether to use digital technology or "classical" textbook materials, most respondents prefer textbook materials or materials they have prepared themselves for a particular lesson. A large part of the respondents (7) leaves the use of digital technologies to the students in preparation for the presentation of certain content or during the repetition. In practice, this means that teachers give students the opportunity or task to present a part of the topic, some historical source (text or picture) for an upcoming class, or in another creative way, take over part of the creation of the teaching material. For this purpose, students use different presentation tools available on the market. Finally, students independently create quizzes or interactive tasks for repetition. Among the respondents, there is a consensus that for specific teaching topics, there is suitable digital material for teaching. At the same time, there is no acceptable digital content for a significant part of the topics. In doing so, they highlight the problem of foreign languages, the inappropriateness of content for a specific age of students, and, for example, the duration of certain content if video clips, documentaries, or feature films are used.

To the related question of why they give preference to classic teaching materials, the respondents indicated: uncertainty as to whether the technology available to students will be helpful (frequent tablet failures and insufficient quality of internet connection in classrooms), loss of time for technology preparation, more complex control of individual tablets in terms of are the students doing what they should or taking the opportunity to play or surf the Internet. Some respondents noted that it is extremely difficult or almost impossible to achieve equality, i.e., the availability of digital technology for

every student in the class. For example, some students cannot work with the help of digital technology. In that case, classic materials must be provided for them in the teaching process, leading to a division of opportunities in the class.

All respondents pointed out the possibility of better presentation of historical events, personalities, culture, and historical stories in general with the help of digital multimedia as the most crucial advantage of digital technology in teaching history. Less than half of respondents (5) mentioned that using well-designed and interactive digital educational content enables students to independently research and draw conclusions about the past. Only one respondent recognized the possibility for additional research of gifted or especially interested students in publishing houses' existing digital educational content.

Regarding the limitations of digital technology, the respondents pointed out the issue of available time as the most significant limitation - insufficient time for the quality preparation of teachers (who must familiarize themselves with some digital content, sufficiently master the use of some digital technology or materials) as well as the big problem of lack of time in the weekly number of hours as well as total time during the entire school year. A small number of respondents (4) cited that students are continuously exposed to screens and various digital tools as a disadvantage of digital technology. That is why they often and intentionally insist on using paper materials, plain text, or images. Searching the Internet for historical content presents a significant challenge to students because they need prior knowledge to assess the value or veracity of the information found. In the absence of time, teachers rarely decide to spend time gradually and studiously take students through the research process. Unfortunately, the problem of fake news was not explicitly mentioned among the respondents.

Respondents were divided on whether today's generation of students is genuine digital natives who skillfully use digital technologies. Most respondents agree that students regularly use digital technologies. At the same time, six respondents believe that this use is skillful and that students use technology correctly. Another part of the respondents believes that students, although they often use digital technology, do not know how to use it for functional educational purposes. At the same time, they point out that most students, for example, refrain from critically evaluating information found on the Internet during research.

Due to the inadequate use of digital technologies, the respondents agree that students should be taught how to use digital technology adequately. One of the interviewees highlighted the question of whether students should learn how to use digital technology only in history lessons meaningfully or should it be part of the basic knowledge that students would acquire from the very beginning of school education (the question of the need and expediency of computer science classes in schools).

Among the respondents, there is a consensus about how to use the possibilities of digital technology meaningfully. They emphasize project teaching that is carried out individually or in groups. Such teaching would be carried out during several teaching hours, and teachers should prepare enough tasks that are carried out in steps or in a specific order. Students would independently research most of the content, present it to others, and create a review. Only one respondent tentatively explained the flipped classroom model as the preferred method of using digital technologies.

III. CONCLUSION

The period of teacher insecurity in using ICT is a thing of the past. Teachers are familiar with the possibilities of digital technology, know that there are different tools, and use them depending on personal preferences. Digital technology is used throughout the teaching process, often not continuously but at appropriate teaching stages.

This research was conducted as a private initiative without the support of educational authorities and is therefore limited in the number of participants. The small number of respondents can only indicate the direction of thinking, but conclusions cannot be generalized for the entire population of history teachers in Croatia. The interview research method is time-consuming because it includes the time needed to organize the interview and the analysis time. Institutional support for conducting research of this type is necessary. The research showed that among teachers, there is a need to question the use of digital technologies. However, it cannot be concluded that teachers are skeptical about using digital technologies, but there is much uncertainty about acceptable use and the need to create adequate teaching materials. When listing digital tools used during history classes, the number of named tools leads to additional questions. For example, how does this amount of tools positively or negatively affect the attention of students who adapt to various tools through all school subjects?

It is interesting and encourages further research that no respondent mentioned the use or possibilities of LMS (such as Moodle). The teachers were exposed to LMS while preparing to introduce the new subject curriculum, i.e., during the recent education system reform. It is also important to note that none of the interviewees mentioned artificial intelligence during the conversation. However, we can only assume that this topic has yet to enter the teaching population, but whether the students will be the forerunners who will, for example, use possibilities like ChatGPT in their little school research or homework. During the research, respondents did not mention gamification, virtual and augmented reality, or active use of 3D models.

Educational authorities and creators of educational policies should systematically and continuously conduct research that would include the teacher population. In addition, there is an urgent need to examine the effects of all forms of teaching, not just teaching with digital technology.

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