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ONLINE TEACHING – TEACHING OF FUTURE

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With the declaration of a state of natural disaster in the Federation of Bosnia and Herzegovina in March 2020[1], caused by the appearance of the coronavirus, the educational process has never been more challenging than ever before. This refers in particular to sudden changes in the forms of the teaching process, through the introduction of online teaching, and to the importance of the level of computer literacy of residents and teaching staff as a prerequisite for quality online teaching. This paper analyzes the situation in the teaching process of primary and secondary schools in Sarajevo Canton, in the period after the appearance of coronavirus and provides an overview of the educational structure of the population in the Federation of Bosnia and Herzegovina and Sarajevo Canton and the level of information literacy. The results indicated a more favorable picture of the state of educational and demographic parameters in the Sarajevo Canton compared to the rest of Bosnia and Herzegovina and a relatively favorable situation in terms of online teaching at the end of the school year.

However, compared to the average situation in developed countries, changes in the educational policy of our country are necessary for better online teaching, because although we live in the era of informatics and technology, and due to the coronavirus epidemic and the need for information literacy, our country and some parts of it they are not always ready to meet this challenge. Despite the fact that the percentage of computer literacy of the Sarajevo Canton population is by far the most favorable in the country, the lack of a true picture of computer literacy of teaching staff and the fact that in the same canton almost a third of the population is computer illiterate (30.5%) must be an alarm to education policy makers for the necessary reforms and a greater degree of digitalization in the teaching process. Online teaching, which was realized in most of the second semester of the school year 2019/2020., in primary and high schools of Sarajevo Canton, only hinted at changes in future directions of development of forms and methods of the teaching process.

Key words: online teaching, educational structure, geography, computer literacy, digitalization of education, coronavirus

INTRODUCTORY REMARKS

Today's world has become very unpredictable. Everyday events leave no more space for people to live in relaxation and well-being of any world remembered through some previous time. Not so long ago, our country was hit by floods and landslides, the consequences of that

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[1] *http://fbihvlada.gov.ba/bosanski/aktuelno_v2.php?akt_id=8420*

are still visible in some parts of our country. Such events did not bypass education. Today, the world and we live in fear of the appearance and consequences of the corona virus. Due to the danger of a possible outbreak of an infectious disease caused by the new corona virus (COVID-19), and in order to reduce the risk of accelerated spread of infection, the Council of Ministers of Bosnia and Herzegovina at its 5th extraordinary session, held on March 17, 2020., made a decision on declaring the occurrence of natural or other disasters on the territory of Bosnia and Herzegovina.[2] It is planned that all institutions, if necessary, put their capacities in the function of preventing the spread of infectious diseases caused by the new corona virus (COVID-19). Many segments of society in that period lost their compass in their operations. In the beginning, the same fate befell education. Thus, the social distance made it impossible for the student to have a regular teaching process, so the children stayed at home. The teaching process had to find an alternative in new methodological forms. In both entities, due to the interruption of regular classes, online classes were organized, via television, the Internet and in other ways, and a digital alternative in classes became a necessity.[3] In the Federation of BiH, education is "under the jurisdiction" of the cantons, so certain differences in the approaches to maintaining the teaching process through individual cantons were visible. In the Sarajevo Canton, by the decision of the Government, online classes were established on March 12. Trainings for online teaching have already been realized earlier. It was stated that the majority of students, as many as 98 percent, have permanent access to the Internet, and for families who were not able to prepare conditions for this alternative form of teaching, the ministry and the non-governmental sector provided students with necessary information resources and access to online teaching.

It is only in such circumstances that most teachers began to understand that the upbringing and education of children and young people for a quality life in the 21st century must be aimed at building competencies that are necessarily different from those dominant in the past. The complex construct of current competencies is based on productive general and specific knowledge with which a person successfully operates and applies them outside the educational context, in everyday and professional life (Dimić J.V., 2013). In 2005, as part of the Information Society and Media initiative (http://ec.europa.eu/information_society/ activities), the European Commission set out eight key competences that every European citizen should possess in order to prosper in a knowledge-based society and economy. These competencies include: the ability to communicate in native and foreign languages, built core competencies in mathematics, science and technology, digital competencies, interpersonal and intercultural skills (ISPL, 2006). An important place is occupied by information and computer literacy skills, which became extremely important after the outbreak of the coronavirus virus.

It has become clear to teachers in the educational process in the schools of Sarajevo Canton and, of course, to other parts of our country that social changes impose new obligations, roles and opportunities on the school and the teacher. It is necessary to develop a new model of school with creative-innovative bases of paradigmatic nature, of course with the parallel development of pedagogical competencies of teachers" (Jurčić, 2012,). Thus, a teacher in today's school needs to have developed different competencies to meet the requirements of today's school. Competencies include knowledge, skills and personality traits (Brust Nemet, 2013), and according to Foro (2015) they are divided into key professional

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[2] *Retrieved from http://www.sluzbenilist.ba/page/akt/bTsBUE4N5GM=*
[3] *Retrieved from http://normala.ba/2020/04/15/online-nastava-u-bih-roditelji-najvaznija-karika-izmedju-skole-i-djece/*

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competencies (subject, methodological, social and self-competence) and practical competencies. Hrvatić and Piršil (2007) define competencies as combinations of knowledge, skills, attitudes, motivation and personal characteristics that enable an individual to act actively and effectively in a certain (specific) situation. According to Palekčić (2005), there are content-subject competencies, diagnostic competencies, didactic competencies, competencies in classroom management and empirical research of effectiveness that belongs to the pedagogical competencies of teachers. In the European Framework of Reference, competences are defined as a combination of knowledge, practical, cognitive and social skills, and attitudes and values relevant to a particular professional and life context.

Digital competencies are not a separate type of competencies, but are an essential part of the spirit of the times in which we live. If we do not have the competence to live in our own present, then we can hardly be experts in upbringing and educating generations for the future.

The forced transfer of teaching to the online space has also highlighted the need for some better, mostly systematic development of digital (IT) competencies of educators who in this aspect have so far been left mostly to themselves.[4] Everyone agrees that regular classes will not be the same as before and that computer literacy will be taken for granted by teachers in the future. Numerous school reforms taking place in many countries of the world, which are related to the harmonization of educational systems with modern social development and building a knowledge society of the 21st century, include the identification of skills needed for teachers in the information society. UNESCO considers it crucial to identify information literacy indicators that should be applied in teacher education (Catts, Lau, 2008). [5] An integral part of digital competence is digital or computer literacy, which is defined as "a basic set of skills that includes the ability to work with numbers and documents, such as word processing software and spreadsheets, use of web browsers, e-mail and browsers" (ECDL Foundation, 2016)[6]. Digital literacy refers to the ability to read and understand hypertext or multimedia texts, and includes comprehension of images, sounds and text (Petzanet, 2019).
According to Scandinavian research from 2014 (Teacher educators' digital competence), which was conducted after the reform and the introduction of new national curriculum in Norway to investigate whether changing the view of teaching and professional training today, the authors came to the conclusion that professional training, but also lectures at the faculty must be in accordance with the needs of teachers and their students, with a lot of practical learning (KuriljA.,2019). According to a European Commission document entitled Common European Principles for Teacher Skills and Qualifications, teacher education should be interdisciplinary and multidisciplinary. This means that the teacher should have: (1) knowledge of the subject he teaches, but also of others similar to him - interdisciplinary knowledge of his profession; (2) pedagogical-psychological knowledge - understanding the developmental characteristics of students, learning styles, student culture; (3) teaching skills - knowledge of teaching strategies, methods and techniques and (4) other knowledge in the field of education - understanding of the social and cultural context of education and school.

According to Diković (2013), Europe increasingly accepts the view that, due to the increasingly complex challenges facing education and schooling, the system of teacher education must be regulated as a continuous process that combines the period of study and

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[4]*Retrieved from https://www.media.ba/bs/magazin/kada-se-skola-preseli-na-internet*
[5] *According to Dimić J.V., 2013)*
[6] *https://repozitorij.pmf.unizg.hr/islandora/object/pmf%3A6155/datastream/PDF/view*

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professional development into a lifelong process.(Diković, 2013). To what extent is our society ready to accept the stated challenges, to face the new reality, for the teaching staff to accept new forms of the teaching process, and what is the general picture with the computer literacy of the inhabitants? These are all questions that will be discussed in this review! For the opportunities in this paper, the analysis for the area of Sarajevo Canton will be used. For the opportunities in this paper, the analysis for the area of Sarajevo Canton will be used. Among the key hypotheses of this research were demographic and educational trends, which are mostly negative, impose the need for more frequent use of online teaching as a teaching method and principle of the future. In addition, it will be possible to investigate the hypothesis that the situation of the population in the segment of educational structure and information literacy is unfavorable and that it is necessary to work on educating primarily teachers who will be able to further educate students in the segment of literacy and computer literacy. . It will be possible to investigate and conclude whether in the specific case Sarajevo Canton is characterized by trends of losing the number of schools, even more so their closure, and whether the trend of reducing the number of classes and their combination is in favor of intensifying online teaching?

DEMOGRAPHIC AND EDUCATIONAL TRENDS IN SARAJEVO CANTON AND ONLINE TEACHING

Until the middle of the last century, international organizations that fought for mass literacy on a global level understood literacy as the basic mastery of reading and writing skills. This basic concept of literacy was, somewhat later, changed by the UNESCO Recommendation of 1978, which adds basic literacy to functional literacy as one of the stages and results of the literacy process. At the end of the 20th and the beginning of the 21st century, another new literacy entered the world stage, in fact the need for information literacy, training for new forms of communication via the Internet and mobile telephony, which is changing, developing and expanding very quickly (Kreso-Pašalić A., 2017). What are the demographic and educational trends of the population in the Sarajevo Canton and what is the future of educational policies based on these trends will be discussed in this chapter. Answers to these questions can be obtained through the analysis of 5 very important parameters: analysis of literacy / education of the population aged 15 and over with the highest completed school, analysis of the population aged 10 and over according to computer / informatics literacy, analysis of births / birth rates , analysis of the movement of the total number of students in primary and secondary schools of Sarajevo Canton and comparison with the situation in FBiH and analysis of the movement of the number of students enrolled in the first grade of primary and secondary schools of Sarajevo Canton in the modern period. In this way, it will be possible to get an answer as to whether online teaching, given the state of the analyzed trends, is a reality or a necessity, or at least Sarajevo Canton is still different from the rest of our country when it comes to these trends.

Serious data on the literacy of the population of our country and in this regard the Sarajevo Canton can be found and analyzed in the Census of population, households and apartments from 2013 which, as such, has a special significance because it came after 22 years of absence any serious verification data. The methodological part of this census deals with the complete educational structure of the population, one segment of which is information literacy. Generally, a person who can read and write a statement about his / her everyday life is considered literate, otherwise he / she is illiterate, while computer literacy is represented

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through a person's ability to process text, make tables, use e-mail and the Internet. In this period, when students had to stay at home and when teachers are in need of using information resources and technology, it is very important to have a clear picture of the educational structure of the population and information literacy. It is still quite indelible fact that in our country in 1991[7] was even 9.9% of the illiterate population. Twenty-two years after that, the situation has greatly improved because according to the 2013 census, in our country the amount of illiterate population reaches the figure of 2.82% or about 90,000 inhabitants. In addition, as many as 14.1% of the population has incomplete primary education or no education at all (see table 1).

Table 1: Population aged 15 and over by highest educational attainment in FBiH and the municipalities of Sarajevo Canton to the population census of 2013.

Area	Total	Wtihout any education	Incomplete primary education	Primary school	High school	Specialization after high school	First degree faculty	Faculty/ academy
FBiH	1,862,272	82,724	167,956	401,188	952,320	13,254	56,720	188,110
Kanton Sarajevo	350,333	9,766	14,669	54,955	186,928	2,385	14,716	66,914
Centar	47,769	675	1,129	5,446	22,213	282	2,724	15,300
Hadžići	19,787	1,177	1,630	4,317	10,861	89	406	1,307
Ilidža	55,476	1,729	2,597	9,887	31,683	375	1,896	7,309
Ilijaš	16,278	990	1,548	3,968	8,352	97	282	1,041
Novi Grad	99,792	2,624	4,062	15,973	55,560	665	4,084	16,824
Novo Sarajevo	55,946	872	1,351	6,456	27,377	446	3,299	16,145
Stari Grad	31,979	710	1,020	4,518	18,034	238	1,353	6,106
Trnovo	1,372	203	217	290	549	13	28	72
Vogošća	21,934	786	1,115	4,100	12,299	180	644	2,810

Source: https://docs.google.com/viewerng/viewer?url=http://fzs.ba/wp-content/uploads/2016/07/FZS_Prezentacija_Popis_2013.pdf

In Sarajevo Canton, compared to the national average and the situation at the level of the Federation of Bosnia and Herzegovina, the situation is much better, but it is still far below the average of the European Union countries. Even 24,435 inhabitants of Sarajevo Canton has no education or is in the category with incomplete primary education. These data should be a "warning" to education policy makers who need to pay more attention to the category of illiterate residents, especially in areas where the illiteracy rate is high and worrying.

According to the data from the Census, 36.2% of the population of BiH is computer literate. Taking into account the methodology listed in the Census: Computer literacy is defined as the ability of a person to process text, create tables, use e-mail and the Internet. The rate of those who declared themselves to be partially computer literate is 23.9%. A person who knows how to perform at least one of the listed activities is considered to be a partially

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[7] *At the time of the census*

computer literate person. A person who does not know how to perform any of the above activities is considered computer illiterate. The computer illiterate population makes up 38.7% of the total population of BiH. In Sarajevo Canton, the data show the highAt the time of the censusest level of computer literacy of all cantons in FBiH, so about 68.7% of the population aged 10 and over is considered computer literate. However, there is still a large number of computer illiterate population (30.5%)[8]

Table 2.: Population aged 10 and over by computer literacy in FBiH and the municipalities of Sarajevo Canton to the Census population from 2013.

Area	Total population aged 10 and over	Computer literate people	Partially computer literate people	Computer illiterate people
Federacija BiH	**1,988,325**	**765,765**	**475,469**	**723,834**
Kanton Sarajevo	**370 879 (100%)**	**196 482 (52,9%)**	**58 382 (15,7%)**	**113 462 (30,5%)**
Centar	**50,161**	**30,451**	**6,518**	**12,820**
Hadžići	**21,172**	**8,337**	**3,710**	**8,802**
Ilidža	**59,151**	**29,711**	**10,669**	**18,365**
Ilijaš	**17,390**	**6,328**	**3,577**	**7,337**
Novi Grad	**105,753**	**55,791**	**17,158**	**32,161**
Novo Sarajevo	**58,783**	**35,922**	**7,670**	**14,870**
Stari Grad	**33,760**	**17,867**	**5,023**	**10,665**
Trnovo	**1,421**	**310**	**183**	**923**
Vogošća	**23,288**	**11,765**	**3,874**	**7,519**

Source: https://docs.google.com/viewerng/viewer?url=http://fzs.ba/wp-content/uploads/2016/07/FZS_Prezentacija_Popis_2013.pdf

Viewed at the municipal level, the municipalities of Centar, Novo Sarajevo and Stari Grad have the highest level of computer literacy, while the municipalities of Hadžići, Vogošća, Ilijaš, Ilidža and Trnovo have a lower level of computer literacy. Such data are justified by the existence of a large number of institutions in which residents of all categories and ages have the opportunity to learn about information technology, computers and acquire the basic knowledge necessary to understand computer skills. Precise data on the level of computer literacy of teaching staff in Sarajevo Canton do not exist. The general assessment is that younger teaching staff is better versed in technology and modern information technology, but this is not and should not be an excuse for the rest of the teaching staff to neglect knowledge of such skills, which became especially clear in the midst of the coronavirus epidemic.

Analysis of the movement of the total number of primary school students in the Federation of Bosnia and Herzegovina for the period from the school year 2005/2006., until the school year 2019/2020., indicates a continuous decrease in the number of students in primary schools. According to the summary data for the Federation, the number of primary

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[8] *https://docs.google.com/viewerng/viewer?url=http://fzs.ba/wp-content/uploads/2016/12/Konacni-rezultati-Popisa-2013.pd*

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school students in the last fifteen-year period decreased by 69,061 students or 27.25%. The decrease in the number of primary school students was recorded in all ten cantons in the Federation of BiH, and in as many as 5 cantons the decrease was as much as 1/3 of the total number of students. In Sarajevo Canton, there are also negative trends in the total number of students because in the same fifteen-year period, Sarajevo Canton lost 7.1% of primary school students, or 2875. All municipalities of Sarajevo Canton in the school year 2005/2006-2019/2020, recorded a decrease in the total number of students, with the municipalities of Trnovo and Stari Grad standing out, in which a smaller number of students with a value higher than ¼ was registered. The most favorable trends in the total number of students were recorded in the municipalities of Novo Sarajevo (-1.67%) and Novi Grad (-3.9%).

The most important reason for the decrease in the number of students enrolled in the first grade of primary school and the decrease in the total number of primary school students in the Federation of BiH and Sarajevo Canton is the decline in birth rates, which is due to the difficult economic situation in society[9].

The most important reason for the decrease in the number of students enrolled in the first grade of primary school and the decrease in the total number of primary school students in the Federation of BiH and Sarajevo Canton is the decline in birth rates, which is a consequence of the difficult economic situation.[10]

Figure 1.: Graph the movement of the number of students in primary school by municipalities in the Sarajevo Canton, for the period from school year 2005/2006.- 2019/2020.

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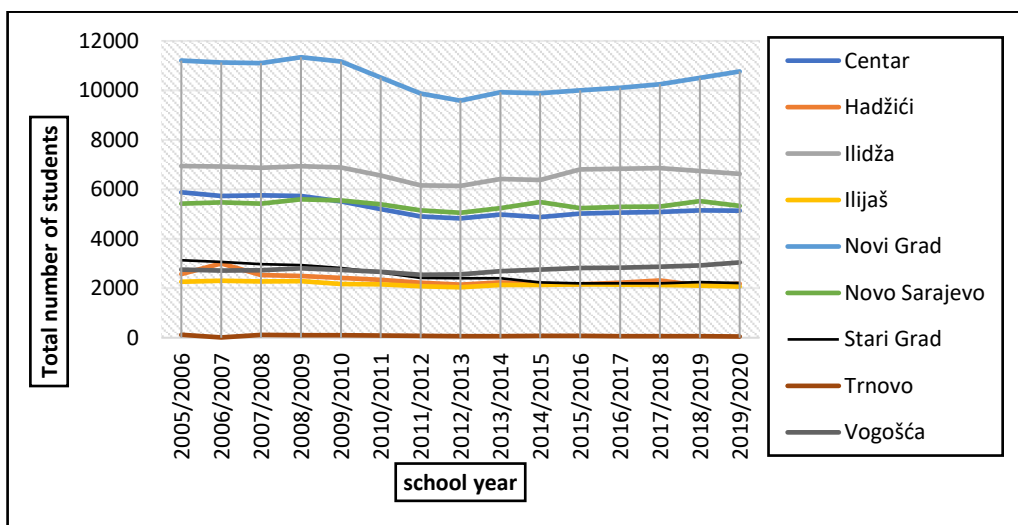
[9] *http://fmon.gov.ba/Upload/Dokumenti/071c06d8-2181-41c5-ba9a-97374cf73bf0_ANALIZA%20uzroka%20nepoha%C4%91anja,%20napu%C5%A1tanja%20i%20smanjenja%20broja%20u%C4%8Denika%20u%20osnovnim%20%C5%A1kolama%20u%20FBiH.pdf*

[10] *http://fmon.gov.ba/Upload/Dokumenti/071c06d8-2181-41c5-ba9a-97374cf73bf0_ANALIZA%20uzroka%20nepoha%C4%91anja,%20napu%C5%A1tanja%20i%20smanjenja%20broja%20u%C4%8Denika%20u%20osnovnim%20%C5%A1kolama%20u%20FBiH.pdf*

The situation with trends in the total number of students in high schools is very similar to the situation in primary education. In the same observed period of the last 15 schools year, the total number of students in high schools in the FBiH has been drastically reduced, from 108,021 (school 05/06) to 73,029 (school 19/20). This means that the total student potential is reduced by 32.3%. All cantons in FBiH recorded a decrease in the total number of students in high schools in this observed period. Unlike primary education, in the secondary education of Sarajevo Canton, in the segment of the movement of the total number of students, the situation is much more unfavorable. This canton has lost 1/5 of high school students (21.4%) in the last 15 years. Observing in relative values, that is less for 5384 students. Observed at the level of Sarajevo Canton municipalities, it should be noted that all Sarajevo municipalities are characterized by a decrease in the number of students in high schools. This is especially evident in Vogosca (38.7%), Ilijas (40.7%) and Novi Grad (34.6%).

There are numerous consequences of such negative educational and demographic trends in the Sarajevo Canton, which stands out as the most favorable in comparison with other cantons. The situation in other cantons is far more difficult and unfavorable - there are cantons and municipalities that have recorded a deficit in the number of students in primary and high schools that is greater than 40% in the last fifteen years (modern) period. In the Sarajevo Canton, among the particularly severe consequences are the closure of primary and high schools and the reduction in the number of classes and students per class. This, in turn, leads to the emergence of teacher technological redundancies, a decrease in students' interest in studying all teaching fields and, in that sense, a complete change in enrollment education policy, especially at universities.

Figure 2.: Graph the movement of the number of students in high school by municipalities in the Sarajevo Canton, for the period from school year 2005/2006., to school 2019/2020.
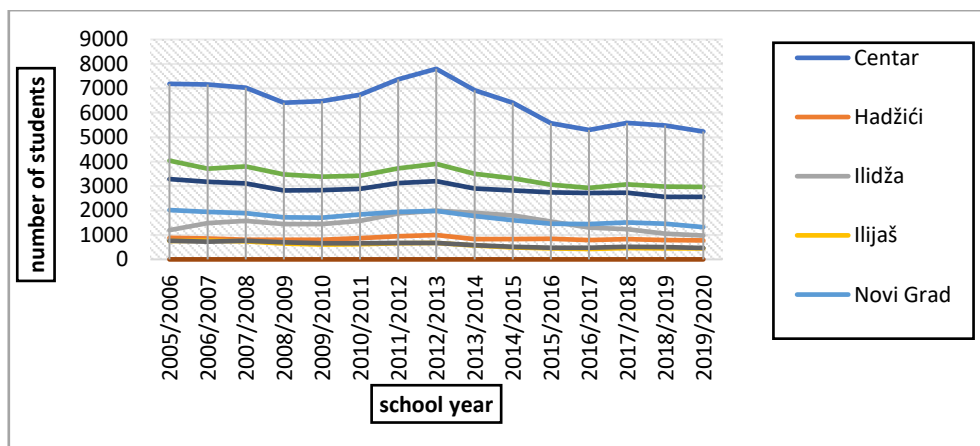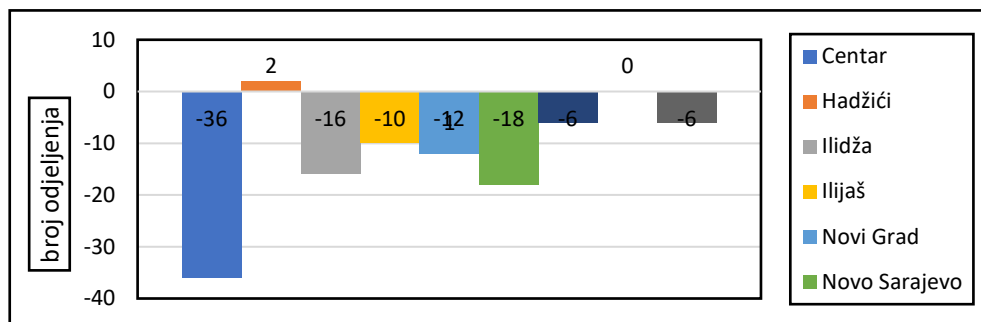

Source: Author; According: Institute for Statistics of FBiH, 2005-2019.,
Statistical Yearbook of the FBiH: 2005-2019.

This analysis of educational trends shows that at the level of the Federation of BiH, as many as 53 primary schools were closed in the same period, and the number of classes/departments was reduced by 1143, which was observed in terms of the need for teaching staff.
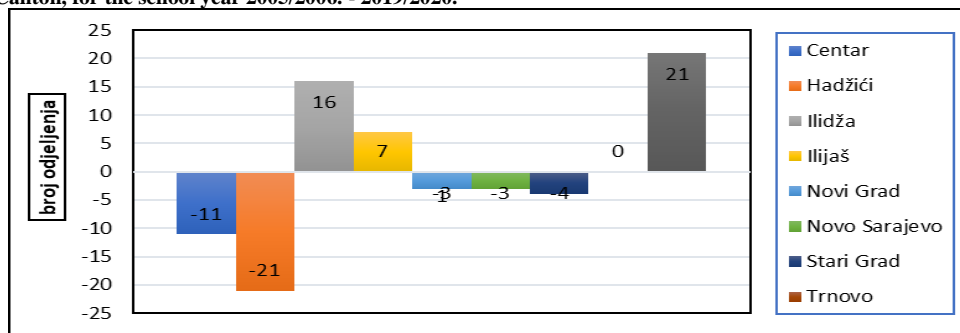
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Figure 3.: Graph the difference in the number of classes in high schools by municipalities in the Sarajevo Canton, for the school year 2005/2006. - 2019/2020.
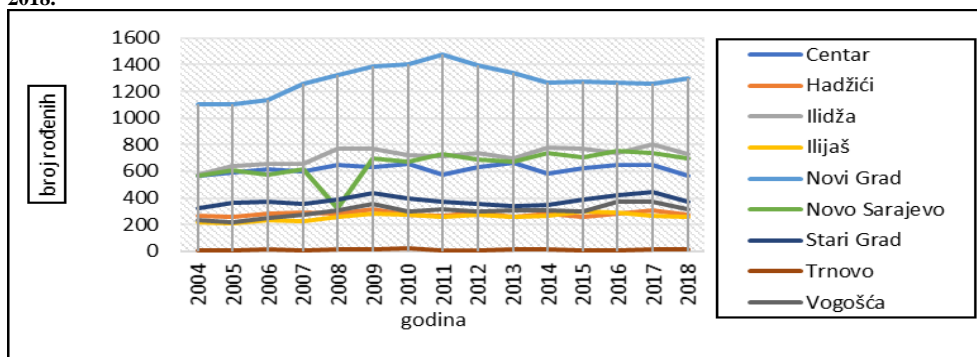
Figure 4.: Graph the difference in the number of classes in primary schools by municipalities in the Sarajevo Canton, for the school year 2005/2006. - 2019/2020.

Figure 5.: Graph the trends in the number of births by municipalities in Sarajevo Canton for the period 2004-2018.

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In the area of Sarajevo Canton, in the same period there was an increase in the number of primary schools, which is one of the few and only positive examples at the level of the whole of Bosnia and Herzegovina. In a similar way, Sarajevo Canton is the only one to record an increase in the number of high schools, with 5 new facilities. Despite this, with the exception of Ilidža, Ilijaš and Vogošća, the number of classes in primary schools was reduced in the rest of the municipalities, and in high schools, all municipalities except Hadžići, recorded a decrease in the number of classes. Of course, in the near future, compared to most projections based on the current state of primary education, further deepening of the negative consequences in high school and higher education in Sarajevo Canton is expected.

It has already been mentioned that this situation with educated trends is a direct consequence of the declining birth rate, which is continuously decreasing, and since 2013, the FBiH entity has recorded a negative natural increase. However, analyzing the situation at the FBiH level, and comparing the situation in Sarajevo Canton with other cantons, it is possible to conclude that Sarajevo Canton is still the only canton that records a positive natural increase.

Figure 6.: The difference in the total number of primary schools in the Federation of BiH for the period 2005-2006. - 2019/2020.
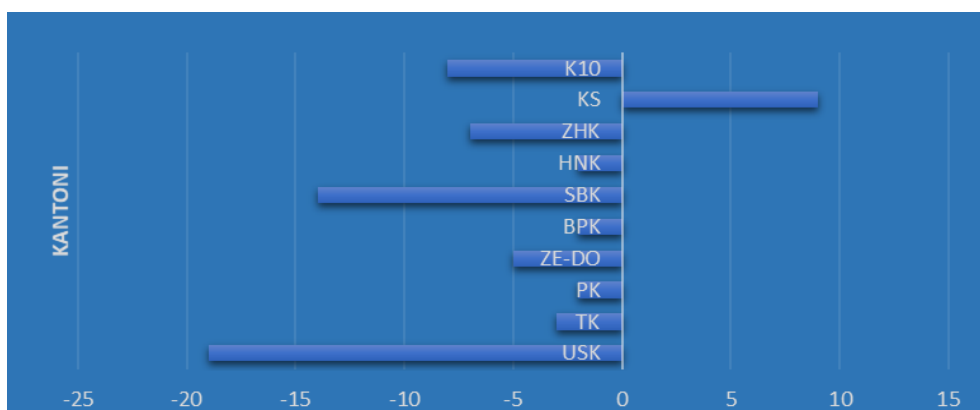
Source: Author; According: Institute for Statistics of FBiH, 2005-2019.,
Statistical Yearbook of the FBiH: 2005-2019.

Birth rates are decreasing but are still positive — there are still more births than deaths. However, this is compensated by the less favorable mechanical component of the population, the consequences of which, as stated earlier in the text, are directly manifested in primary and high school education. From the representation of the age pyramid of the population of Bosnia and Herzegovina, it can be seen that the bottom of the pyramid is indented (the so-called children's base), and that the columns, representing children aged 0 to 14, are narrower compared to older age groups. This is a consequence of the low and declining birth rate, but also the emigration of the population outside the country, which continued after the war, primarily for economic reasons (Zolić H., Emirhafizović M., 2017).

All of the above indicates the directions of future development of the teaching process, primarily in the direction of online teaching as an alternative but also a necessary form of the teaching process. Combined classes, losing the number of students in schools and reducing the number of students in classes are in favor of intensifying online teaching, which depends

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less on how many students will be in the class, whether all students in the class are the same age and how many students will be in school! Analyzed educational and demographic trends indicate that there will be fewer students and classes in schools and that there will be fewer schools in cities and villages. In this sense, online teaching could become a very important teaching method because as time changes so does the need for new competencies. What at one point makes a satisfactory level of certain skills and competencies appropriate in a particular context, will necessarily change over time (Dimić V.J., 2014). It is in the nature of every human ability to change and evolve over time. Since this is the computer era, the future will inevitably require knowledge of a minimum of digital and IT competence, especially for teachers.

Not going so far into the future, this time marked by the corona virus pandemic only gave an indication of what the future holds and what will be necessary to adopt a teacher to keep up with the times and to continue to meet important didactic-methodological aspects of the teaching process. The advent of digital media is putting new pressure on schools. They should prepare students and young people for qualitatively changed opportunities in society and their future roles of workers and citizens. The change in the world of work should be accompanied by a change in the content, form and structure of learning. An essential feature of a new learning culture is that learning is constantly changing and that it must ensure its own constant variability. In this sense, a 21st Century teacher, in order to be a literate teacher of the digital age and competent to lead the teaching process, will need to have visual and informational skills and multicultural literacy as well as global awareness. It is therefore necessary to transform the learning and teaching process in order to improve it and harmonize it with the current time, and even with the projected future needs.

AN EXAMPLE OF THE IMPLEMENTATION OF ONLINE TEACHING IN PRIMARY SCHOOLS IN SARAJEVO CANTON

In primary and high schools of Sarajevo Canton, teaching geography and other subjects during the coronavirus epidemic took place through an online platform. This was preceded by the suspension of the regular teaching process in the classrooms, which is the product of an order issued in accordance with the decisions of the Council of Ministers of BiH and the Government of the Federation of BiH. It is a matter of declaring a natural or other disaster on the territory of Bosnia and Herzegovina, and due to the danger of spreading an infectious disease caused by coronavirus, as well as in accordance with the orders of the Federal Civil Protection Headquarters and the KS Government Decision on declaring a natural and other disaster. Soon, for the purpose of online teaching, professional teams were formed, and by orders of the relevant ministry, recommendations were issued to all schools on new work (circumstances). Thus, online classes were treated as regular classes that students successfully completed on June 12, 2020, and in which there was no compensation for classes. By definition, it is an educational process in which the teacher and the student are separated and in which educational content is delivered to remote locations using information and communication technologies that include written correspondence, text and hypertext, graphics, audio and video media, direct instructions via telecommunication channels (so-called online learning), application of audio and video conferencing systems, interactive TV.[11]

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[11] _http://ossskranjcevic.edu.ba/wp-content/uploads/2020/02/Uputstvo-za-realizaciju-prakse-Online-nastava-.pdf_

Many teachers have realized that the use of the latest information and communication (ICT) achievements during the educational process breaks the tradition in which teaching is a one - way process where the teacher transfers knowledge, which students passively adopt and then reproduce as learned. However, the use of information and communication technologies has helped teachers to create a stimulating learning environment within their subject in a way that makes teaching more creative, challenging, interesting, functional and meaningful.[12]

Most primary and high schools in Sarajevo Canton used the Office 365 platform - Micsrosoft Teams, which proved to be very practical in the online teaching process. On the same platform, it is possible to form so-called "classrooms" that can have different purposes. Thus, one classroom can consist of one class with a teacher of a specific subject. Also, for the purpose of fulfilling all pedagogical-psychological obligations, classrooms can be composed exclusively of teaching and pedagogical staff, ie Class or Teacher Councils. It enables visual and textual exchange of necessary contents in order to fully realize the teaching process. It is important that the same platform enables the archive of all documents, data and communication, which can always be an excellent proof of the manner, quality and realization of the online teaching process.

Figure 7.: Example of the layout of the Office 365 platform - Microsoft Teams with dedicated classrooms
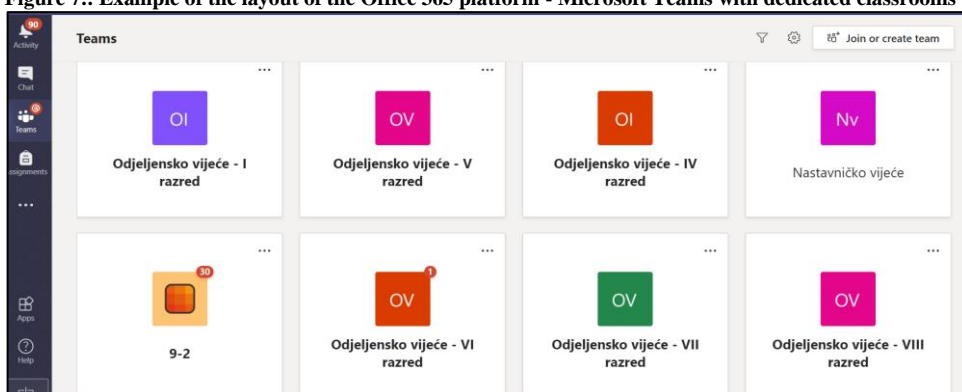
Teachers' experiences with the use of this platform and the online teaching process in general are different. However, everyone agrees that this is an important step towards future modalities of the teaching process, and that for many teachers this was the first serious experience with the use of information and communication technology in teaching.

Future directions of online teaching development

The time in which we live is characterized by the intensive development of science, technique and technology, which places new demands on education every day. Thanks to the rapid development of information technology in the broadest sense, pedagogical technology is becoming more modern and inspiring, both for students and teachers. Without digital literacy today it is not possible to speak of a teacher who is ready to live in a modern world full of obstacles. The necessity of this knowledge is most pronounced in the field of

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[12] *http://ossskranjcevic.edu.ba/wp-content/uploads/2020/02/Uputstvo-za-realizaciju-prakse-Online-nastava-.pdf*

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education.[13] Modern forms of integration of technology into teaching are based on the involvement of students in the active use of technology when, for example, performing teaching tasks. In doing so, teachers themselves must model the use of various computer tools and technologies, e.g. databases, online discussions, presentation software. In order to effectively integrate modern technology into teaching, teachers need two types of competencies (Witfelt, 2000): - basic computer / information literacy related to teacher competencies for the use of ICT at the user level, e.g. multimedia management, use of search capabilities, auxiliary functions, etc. and - multimedia didactic competencies related to the developed methods of working with ICT in teaching and various "rescue strategies" for solving specific problems.[14]

The general assessment is that the digitalisation of education is likely to take deeper roots than it has managed so far. Like any other form of teaching process, online teaching has its advantages and disadvantages. First of all, it should be said that the classroom and regular classes are something that can never be completely replaced. New forms of the teaching process can improve teaching in a certain way, especially since the teaching process must keep pace with the times. The online teaching process that ended this school year in Sarajevo Canton, but also in other cantons, showed great interest of students. On the other hand, parents have an excellent insight into the level of commitment and work of their children, and teachers can more easily realize the opportunity to learn and progress through the team. The online teaching process is a great opportunity for teachers to finally establish the long-sought interdisciplinary, multicultural and interstate cooperation, which is a very important segment of teaching. Geography, as a subject, is of first-class importance in that, because geographical studies have never been unfamiliar with the cause-and-effect relationship: nature - society and the processes that arise from that relationship (Spahić M., 1999).

Geographers in their research must rely on research from related and other professions, and connect with scientists from various natural and social sciences to more easily arrive at some insights, so it is necessary to deal with many computer knowledge and skills.[15] In the analysis of the shortcomings of online teaching, it should be said that the platforms that are used are often overloaded, that this type of teaching depends on the quality of the Internet, and that parents often take on the role of teachers. Simultaneous online classes for several students in one family can create a problem in capacity and sometimes students are burdened with homework. Also, there is a lack of social interaction and more frequent use of the method of conversation as an unavoidable method of the teaching process that initiates the use of conversations with students about a given teaching unit (Spahić M., 2014).

This type of teaching has certainly raised the question of the importance of reforming curricula and redefining learning outcomes and goals of the teaching process. Of course, greater achievements in online teaching for teachers will be possible when they are provided with greater methodological training in the use of information and communication skills and when they themselves have the opportunity to take more training in the field of information and communication technologies. The quality of teaching work is an indicator of a teacher's education. Students learn in different ways, so modern teaching should be a process of active and partner acquisition of competencies in the pedagogical relationship between students and teachers, teaching materials, supplies and media intervention (Skupnjak, 2011).[16] On the other

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[13] _http://ossskranjcevic.edu.ba/wp-content/uploads/2020/02/Uputstvo-za-realizaciju-prakse-Online-nastava-.pdf_
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[15] _https://www.pmf.unizg.hr/geog/o_geografiji/razvoj_geografije_
[16] _According to https://repozitorij.pmf.unizg.hr/islandora/object/pmf%3A6113/datastream/PDF/view_

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hand, the state has a responsibility to ensure the competence of their teachers, which includes initial teacher education, as well as their training for continuous professional development, thus developing competence and practice of lifelong learning including information and computer literacy.

CONCLUSION

There is no doubt that, in the context of the knowledge society, teacher competencies for the effective use of information and communication technology in learning and teaching processes are the most complex (Batarelo, 2007). The development of information and communication competencies of teachers aims to achieve education in the spirit of the times in which we live. (Dimic VJ, 2014). This research has shown that teachers have a key role to play in preparing students for their role as citizens. It is therefore imperative for teachers of all subjects, and especially for teachers of geography, to be educated, to be aware of the common cultural foundations, as well as the rich national and regional differences that share them. For mastering scientific means, methods and forms of work in getting to know the real world, the modern geography has penetrated into the essence of natural phenomena, and the same in essence social processes as well as in their mutual interaction connection (Spahic M., 1999).

Furthermore, the paper showed that it is necessary to study subjects more frequently in teacher education studies that will satisfactorily treat the application of computer tools and technological achievements. This will at all times, especially the information age, put the teacher in the place he deserves, and that is to be able to educate students in the essence of the object and subject of studying their field, either through online teaching or other forms of teaching. It should not be forgotten that the best are those teachers whose students know best (Spahić M., 2015). Through a concrete analysis of online teaching in Sarajevo Canton and educational and demographic opportunities in this canton, it is possible to notice several important things. Sarajevo Canton, given the earlier introduction of e-diaries, has a clearer picture in the direction and development of online teaching process than other cantons, has the most computer-literate population, record the lowest trends in reducing the number of students in primary and high schools and reducing the number of first-graders. It is also characterized by a still positive natural increase as a very important factor in the development of education.

Regardless of what is considered the most favorable canton in these parameters, the general picture of the situation indicates lagging behind the average of developed countries in Europe, especially when it comes to general computer literacy, the highest rate of school completion and readiness to accept challenges with online teaching.

Future similar analyzes for other cantons and the rest of our country may give a clearer and very likely less favorable picture for the whole of Bosnia and Herzegovina. The online teaching process in Sarajevo Canton, which successfully completed the school year, as a key advantage for the future, proved to be greater independence of students in activities and involvement in teaching. This has always been the goal of teachers to reduce the frontal form of work through a greater emphasis on the student and his involvement in teaching. In the context of geography, there are contents that can be presented to students both visually and audio-visually, so it is a real shame not to use such an opportunity. It makes it easier for teachers to present content and for students to understand it.

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Proper use of technology by students is very important in achieving the correct goals of the online teaching process. Lifelong learning programs funded by all levels of government can enhance the computer literacy of the population and train teachers with the necessary computer skills sufficient to educate students through online teaching.

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