A New Digital Approach to Teaching and Developing Language Skills

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Abstract Language is an abstract system of signs manifested through the language activities of listening, speaking, reading and writing. Encouraging development of all four language skills is one of the goals of Croatian language (mother tongue) classes at the Faculty of Teacher Education. Since the coronavirus pandemic has affected two school and academic years and caused the transition to online classes at faculties, teachers are facing the challenge of transferring knowledge to students and motivating them to actively take part in developing language skills in a virtual environment, especially the skills of active listening and speaking. Communication with students is made possible using digital tools, but they are less adequate for assessment and monitoring students' progress. Therefore, a study was conducted via online questionnaire on students' satisfaction with online classes, comparing online and physical classes, students' media consumption, reading habits and their use of free time. The results showed that the students were satisfied with online classes, but they preferred face-to-face classes, and they thought that online classes should be more creative and more interactive.

Keywords:
online classes, Croatian language, digital tools, reading habits, media consumption

University of Maribor Press
DOI https://doi.org/10.18690/um.pef.1.2023.22
ISBN 978-961-286-718-8

1 Introduction

Changes in the Croatian education system are slow and do not occur in a parallel manner on all the levels of the education system. Some of the key documents in the education policy, such as teaching curricula (the one for gymnasiums dates from 1999 and the one for primary school is from 2006) or the National Curriculum Framework that was adopted in 2010, and then nine years later, the subject curricula are a good illustration. The inability of the system to adjust to changes is evident in Croatian students' results on the PIRLS (2009) and PISA (2018) tests. One of the indicators is the attitude of Croatian students towards Croatian language, which has been negative for years, according to Pavličević-Franić and Aladrović Slovaček (2011) and Miljević-Riđički et al. (2000). Scientists have also identified a problem with our students' functional literacy (Aladrović Slovaček & Čosić, 2018). The *School for Life* program, which has been in the experimental stage since the 2018/2019 school year, can be considered as one of the possible solutions for the systemic problems.

However, even though the system is inert, we live in a dynamic world and a fast-changing society. Founding the Croatian Academic Research Network (CARNET) in 1991 and the University Computing Centre (SRCE) in 2007 marked the beginning of the process of digitalization of the education system, which was accompanied by numerous impulses and obstacles. Clearly, digitalization comes with new challenges for the education system and the answer to these challenges was, indisputably, mostly individual and depended on the motivation and competence of teachers and educators. For most teachers, ICT technology was not included in their professional education, but they acquired these competences over the course of their professional development, both formal and informal.

Soon after the outbreak of the pandemic, in March 2020, the decision was made to suspend classes at universities, secondary and primary schools and to suspend day care in kindergartens and continue their classes and educational activities online instead. From that point on, classes in primary and secondary schools, as well as at universities, were held exclusively online. Some kindergartens even started offering their educational content online. Jukić (2017) defines online learning as a relatively new way of distance learning and at the same time as a kind of e-learning. Since online learning is defined as a type of learning in which most of the educational

content is delivered to students via the internet, the authors have decided to use this term as the umbrella term in this study, since it implies both distance learning (despite not being the only form of distance learning) and e-learning. E-learning is understood and used as a term that implies a technologically supported and interactive process between the student and the teacher (Dukić & Mađarić, 2012).

Until the outbreak of the pandemic, e-learning was mostly only present at universities. Activating the C model of teaching, educators and teachers started distance teaching[1] using various digital software, tools and platforms[2], but they were also supported by the Ministry of Science and Education by creating school lessons that children could watch on TV[3].

Even though online teaching and the consequences of using digital teaching tools have been the subject of controversy, so that even terms like digital dementia (Spitzer, 2018) are discussed, the pandemic has made us reconsider and change the way we think about education and pedagogical work. Despite some disadvantages, *online* teaching has a significant number of advantages that we, as practitioners and scientists, have to take into consideration. It is especially important to gain insight into what future educators, teachers and students from the Faculty of Teacher Education in Zagreb think about online classes.

2 Research Methods

2.1 Main Objectives of the Study and the Hypothesis

The primary goal of this study was to examine the attitudes of students at the Faculty of Teacher Education in Zagreb about the quality, advantages and disadvantages of online classes, especially of Croatian language (mother tongue) classes and about how students spend their free time in the context of the pandemic and online learning. In accordance with the primary research goal, the following problems were defined:

[1] *online* classes
[2] e. g., Yammer, Microsoft Teams, Google, Zoom, Viber, and WhatsApp.
[3] TV School on Channel 3 (HRT 3) and higher grades of primary school on RTL.

1. To examine students' attitudes about the quality of online classes, their level of creativity, use of digital tools and comparison between online and face-to-face classes.
2. To examine students' satisfaction with online classes and their self-evaluation of the quality of student life during the pandemic.
3. To examine students' habits regarding the way they spend their free time and use social networks and 'screens'.
4. To examine students' reading habits and their self-evaluation of their reading competence.
5. To examine whether students' attitudes differ according to their study program: teacher education/early childhood and preschool education.

In accordance with the primary goal and research problems, the following hypotheses were determined:

H_1 – It is expected that students are satisfied with online classes, but it is their opinion that online classes could be more creative, and in comparing online and face-to-face classes, they prefer face-to-face classes because they can establish a closer relationship with their teachers and there are unlimited possibilities for approaching various types of tasks.

H_2 – It is expected that students are satisfied with the quality of online classes, i.e., that they assign it, on average, a very good score, but they are not satisfied with the quality of student life during the pandemic because they feel isolated, with fewer possibilities for collaboration, communication and socializing.

H_3 – It is expected that most students spend a minimum of 2 hours a day on social networks and some students even more than that. It is also expected that students learn foreign languages and read books in their free time.

H_4 – It is expected that students read at least one book a month, i.e., a minimum of 12 books a year. It is also expected that they read paper books; they less frequently read on a screen, and if they read on a screen, then it is newspapers, news, and articles of interest. If they use a digital device for reading books, it is expected to be a Kindle, and the literature, they read in such a way, is expected to be in a foreign language.

Moreover, it is expected that most students have very good or excellent reading competences.

H_5 – It is expected that the students' reading habits in the teacher education study program are better developed and that they on average learn more foreign languages than students in the early childhood and preschool education study programs. Other differences are not expected to be statistically significant.

Data were processed in the SPSS program for statistics. The Kolmogorov Z test showed that the data were not distributed regularly ($p < .05$), so nonparametric statistical tests were used for analysis to compare the results between two groups of students: teacher education and early childhood and preschool education students. *The Mann-Whitney U test was used to compare these two groups. Apart from SPSS, a computer-linguistics program, *Sketch Engine*[4] for text analysis was used to more easily process the questions that the students answered textually. For the purposes of the study, a frequency dictionary according to textual questions was created to facilitate classification and interpretation of the students' answers.

2.2 Sample Description

The sample included 158 students from the Faculty of Teacher Education in Zagreb. Among the students, some were first, second- and third-year students in the full-time primary teacher education study program (32%), some were first, second- and third-year students in the full-time and part-time undergraduate study program of early childhood and preschool education (46%), and some were students in the full-time and part-time graduate study program of early childhood and preschool education (22%). All categories of students educated at the Faculty of Teacher Education in Zagreb were included in the study. As many as 98% of the participants were women.

[4] https://www.sketchengine.eu

2.3 Description of the Research Instruments

The study was conducted in June 2021 in the last week of the school year, wherein classes were held entirely online from 1 December 2020 until the moment of filling out the questionnaire. The questionnaire consisted of 15 open and closed questions, which focused on explanations about the quality of online classes. There were a few questions in which students were asked to evaluate the quality of online classes using a 5-point Likert scale, and the quality of their own lives during the pandemic using a 10-point Likert scale. Apart from examining attitudes, the questionnaire contained certain sociodemographic data: the students' class year and study program, and their gender, so that all data could be compared.

3 Results

The first research goal was to examine the students' attitudes towards the quality of online classes, their creativity, the use of digital tools and the comparison between online and face-to-face classes. The results showed that the participants' assessments of the quality of online classes ranged from 1 (very poor quality), which was answered by 0.6% of the participants, to 5 (very high quality), which was answered by 18.5% of the participants (*Figure 1*). The average result was 3.7. Most students evaluated it as very good.

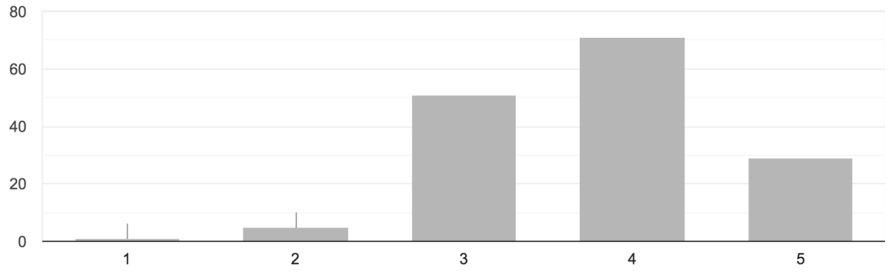

Figure 1: Quality of online classes

In assessing the creativity of online classes, the students used scores from *it was not creative (2)* to *it was very creative (5)*. Most students, 40.4% of them, chose the answer *it was neither creative nor uncreative* (*Figure 2*). The average score that students assigned creativity was 3.57 (M = 3.57).

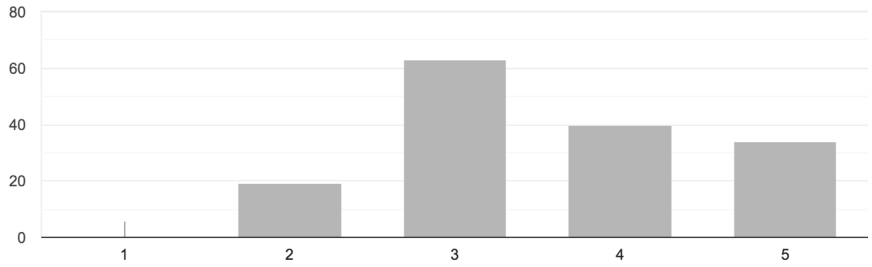

Figure 2: Creativity of online classes

Since most classes were held online (about 85%), the students assessed the use of digital tools during online classes. Most students, 38.5% of them, thought that the use was of high quality, whereas 11% of the students considered the use of digital tools to be of low quality (*Figure 3*).

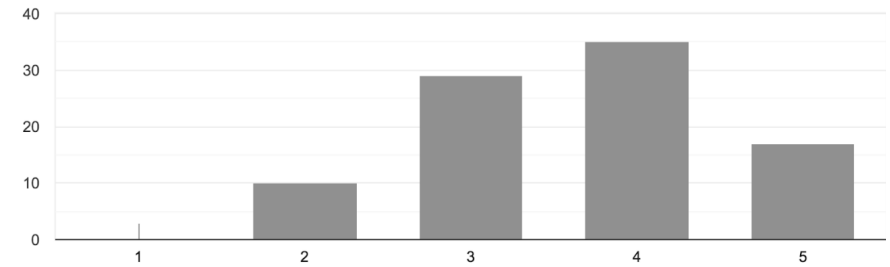

Figure 3: Use of digital tools

There were several open-ended questions in the study, and the following is an interpretation of the answers. In comparing online and face-to-face classes, the students considered online classes to be: more boring (15); more difficult (11); more exhausting (10); simpler (9), more practical (9), easier (9), more demanding (8), more monotonous (8), worse (6), more flexible (6), more relaxed (6), more pleasant (4), more informal (4), cheaper (2), more adaptable (2), more accessible (2), more uniform (1), more boring (1), more fun (1), more efficient(1), more confused (1), more modest (1), more demotivating (1).

Table 1: The students' answers to the question: What would you change in online classes?

Make them more interactive.
Higher level of organisation.
Obligatory use of cameras to facilitate communication and to know who we are communicating with.
Higher level of creativity in classes.
I'd like them to be more interactive, so that we get to know each other better.
More time devoted to practical work instead of lectures.
In my opinion, students should be more active in classes so that their activity is not reduced to only listening.
More creativity, encourage students to take a more active role.
More dynamics in classes, more interaction.
More creativity in teaching, more conversation with students, more everyday examples to facilitate understanding, less content so that we can acquire and learn it better.
More group work, individual work.
More exercises, practical work.
More communication.

The results above confirm the first hypothesis. They demonstrate that students were satisfied with online classes, but in their opinion, the classes were not very creative. When comparing online and face-to-face classes, the students were in favour of face-to-face classes because of the more spontaneous relationship between the teacher and students which, as they stated, they missed very much, but also because it is impossible to implement creative, interactive and engaging communicative tasks that are particularly important in mother tongue (Croatian) classes.

The second research goal was to examine the quality of online classes that were held and the assessment of the quality of student life during the pandemic. The students expressed their satisfaction on a scale from 1 (not satisfied at all) to 5 (very satisfied). On average, the students gave the quality of online classes a score of 3.75 (M = 3.75), i.e., the students were mostly satisfied with the quality of online classes. This score can be compared to the average score they assigned to the creativity of online classes: 3.57 (M = 3.57), and the Wilcoxon test shows a statistically significant difference between these two scores, i.e., that the students were statistically significantly more satisfied with the quality of online classes than with their creativity (*Figure 4*).

Figure 4: Creativity (M) and quality (M) of online classes on a scale of 1 to 5

A 10-point scale was used for the students' assessment of the quality of their own lives during the pandemic. On average, they assigned a score of 6.45 (M = 6.45) to the quality of their own lives, which means that they were neither satisfied nor dissatisfied with the quality of their lives during the pandemic. Presumably, the assessment depended on the area where they lived, but also on some other circumstances in their lives (*Figure 5*).

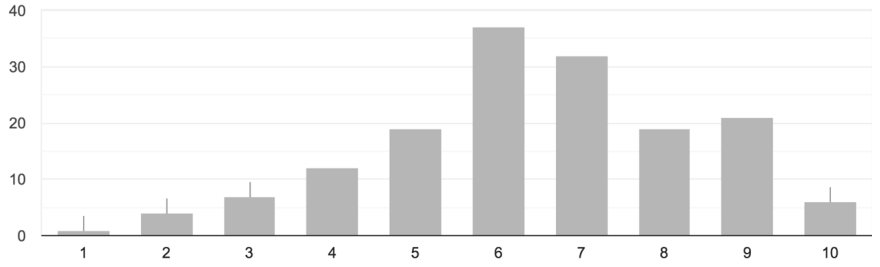

Figure 5: The students' quality of life during the pandemic

The described results to a great extent confirm the second hypothesis – that students are satisfied with the quality of online classes, i.e., that they assess it, on average, as very good (M = 4) on a scale from 1 to 5. Thus, the second part of the hypothesis, that students will assess the quality of their lives during the pandemic as a score of 5 on a scale from 1 to 10, is partly confirmed and can be explained by increased isolation, and reduced possibilities of collaboration, communication and socializing. However, the results demonstrated that the students were somewhat more

optimistic than expected, and the average score they used to assess themselves was 6.45.

The third research goal was to examine the students' habits regarding the way they spent their free time and their use of social networks and 'screens'. In their free time, the students most often socialized with their friends, went for nature walks, watched films and series, drew, hiked, did sports, roller skated, rode bikes, but they also cooked, sewed, played an instrument in a band, played computer games, and expressed themselves in a creative way (mostly manually). About 28.5% of the students spent 2 to 3 hours a day on social networks, 27.8% of them spent 3 to 4 hours, and not an insignificant number of them spent more than 6 hours on social networks. The students were also asked if they study foreign languages in their free time. Of the total number of participants, 38% of them answered that they did not study foreign languages in their free time, 30.4% of them study one foreign language, 13% study two foreign languages, and 19% of the students would like to learn a foreign language, but they lack either time or the financial means to do so.

If one considers all the presented results, the third hypothesis, that most students spend a minimum of 2 hours a day on social networks and some students more than that, can be partly confirmed. Most of the students spent more, i.e., 3 to 4 hours a day on social networks. Moreover, the second part of the hypothesis, that students study foreign languages and read books, can be partly confirmed, since a certain percentage of students do so, but there is a significant percentage of students who engage in other activities.

The fourth research goal was to examine the students' reading habits. The results show that almost 40% of the students read in their free time, but it is interesting that 10% of the students stated that they did not read at all in their free time.

More than half, or 54.5% to be precise, of all the students also claimed to be reading a book at the time of the study. For most of the students, reading was an *escape from reality, relaxation, rest, a source of knowledge and a window to the world.* On average, the students read 5 to 6 books a year, i.e., one book every two months. Most of the students, 60.4%, read only paper books, and 6,6% of them only read books on digital devices, whereas 33% of the students read both paper and digital books. The students mostly used their iPad, smartphone, laptop, or computer to read books in

a digital form. The students also assessed their reading competences on a scale from 1 to 5. More than half of them, 54.9%, thought they had very good reading competences, about 12% considered their reading competences to be excellent, and only 5% of the students were not satisfied with their reading competences (*Figure 6*).

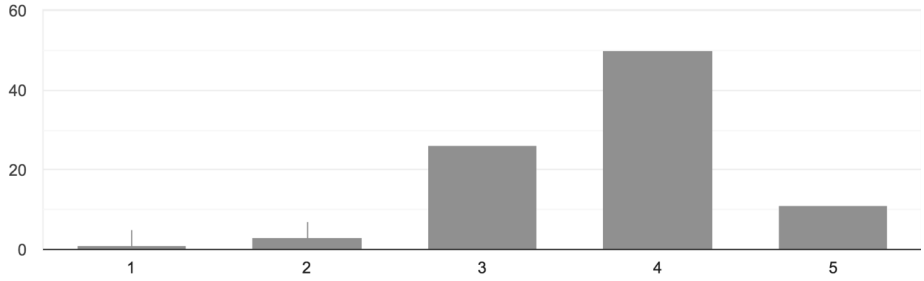

Figure 6: The students' assessment of their reading competences

What students most often read on screens are the news, motivational articles, articles about health and self-help, popular psychology, world trivia, and funny and entertaining texts, i.e., those that are intended to make you laugh. The results showed that the first part of the fourth hypothesis, that students read one book a month, is to be rejected. The second part of the fourth hypothesis, that students mostly read paper books and read news and other articles of interest in a digital format, is confirmed. The third part of the fourth hypothesis, that students will mostly use a Kindle for reading digital books, is rejected, since students mostly use their smartphone, iPad, laptop or computer. However, the fourth part of the same hypothesis is accepted, since the authors confirmed that the students assessed their reading competences as very good.

The fifth research goal was to examine whether there is a difference between students regarding their study program: teacher education/early childhood and preschool education. The results show that there is a significant difference in the students' attitudes towards creativity in teaching online classes, the number of books read in a year, and the quality assessment of online classes. Early and preschool education students assigned statistically significantly better scores both to the quality and creativity of teaching in online classes, while teacher education students read significantly more books than early and preschool education students, as indicated by the results of the Mann Whitney U test on the significance level of 5% ($p < .05$).

The fifth part of the fifth hypothesis, that teacher education students will read a significantly greater number of books in a year, is hereby confirmed, but the second part of the hypothesis, that teacher education students will learn foreign languages to a greater extent and more frequently, is rejected. Moreover, the fifth hypothesis did not expect a difference in attitudes towards online classes, their quality and creativity, which is certainly interesting because teachers who teach in both study programs do not differ significantly, but the curriculums of these study programs differ significantly, which might have influenced teaching and creativity in online classes.

4 Discussion and Conclusion

The coronavirus pandemic has brought many changes to education and the need to adapt to new conditions. Although the Croatian education system had been preparing for action in the digital environment for some time, the pandemic accelerated the whole process and made for a readiness test, especially at universities, where teaching in the digital environment has now been active for almost a year and a half. The results of this study are indicators of the success or failure of this way of working and, in addition to expressing satisfaction with teaching in a digital environment, they also portray the students' reading competences, attitudes towards reading in digital form, and time spent in front of screens. All this is not only a consequence of the pandemic situation, but also the way of dealing with the new life and professional situation. Accordingly, the students assessed their satisfaction and self-assessed their own competences throughout the process. The first part of the study was dedicated to attitudes towards teaching in the digital environment. There were two key elements in the students' assessment of online classes – quality and creativity. The disadvantage of online classes, that was mentioned most often, was a lack of interactivity. Spontaneity has become almost impossible in the new circumstances and because the context of teaching and learning has changed completely. The fact is that digital tools offer numerous possibilities for interactivity in online classes (Dukić & Mađarić, 2012) and, as is shown in *Table 1*, interactivity is most often what the students suggested should be improved in online classes, i.e., students being more actively involved in the process. It is, most certainly, one of the directions of improvement that should be considered. *Figure 4* shows, however, that the students were significantly more satisfied with the quality of online classes than they were with their creativity. Moreover, the students did not assess the creativity

of online classes as very good, but they were not completely dissatisfied with it. Many students, 40.4%, chose the answer *neither creative nor uncreative*. The authors are inclined to think that the participants, the students of both study programs, were familiar with more digital tools than their teachers. Apart from that, the authors assume that teachers used the tools that were available (offered, free etc.). Considering the obtained results, the authors concluded that the teachers accepted the challenges of the time in accordance with the possibilities on offer and their own competences. However, from the point of view of the study, a much more interesting question is how participation in online classes will influence the participants and their perception of the educational process and how it will influence their future job and use of e-tools in contact educational work and to what purpose these will be used. The results show that it is still necessary to educate teachers about the possibilities of the digital environment and, accordingly, encourage the use of digital tools in contact teaching to use the potential of everything that can be found online, but also to get closer to students, since they spend most of their free time using screens. Also, it is important to encourage various methods in teaching that are possible live and online, such as breakout rooms in online teaching and group work in live teaching. These are only some of the questions that arise when considering new moments in education. Are students of both early and preschool and teacher education trained to methodically reflect on how they use digital tools? And, if the answer is yes – how is it done? The starting point was that the participants were familiar with many different digital tools and the ways they are used, but working with children, the crucial question is whether their use is methodologically sensible and justified. All these questions are open for debate, as well as those that call for action and changes that are to be introduced into the system, at a much faster pace than has been done so far.

One of the main reasons for quickening the pace of these changes is the time we live in and the fast-changing society and technology, but it is also true that students, future kindergarten teachers and primary school teachers are digital natives (Spitzer, 2018). This fact explains the results of the students' assessment of their quality of life in the pandemic. They belong to a generation that communicates and consumes a great deal of content every day using modern technologies, and they do it for hours. They certainly spend a part of their free time engaged in other activities, as described before, such as learning foreign languages and reading books. It is expected that some participants, who study foreign languages in their free time, understand that

speaking another language and multilingualism are advantages if one is to further develop their linguistic competence. The activity of reading and reading habits are definitely helpful as well. What is a little concerning is that there are students (10% of them) who do not read books at all, and the 40% of those who read, only do it because reading is an *escape from reality, relaxation, rest, a source of knowledge and a window to the world*. Considering the reasons to read, it is not surprising that the participants read news, motivational articles, articles about health and self-help, popular psychology, world trivia, and funny and entertaining texts. On the other hand, they only rarely read fiction (between 5 and 6 books a year). The authors assume that they read professional and scientific literature more because it is also their exam literature. Apart from the limited choice of text types, it is evident that a certain percentage of students, 6.6%, only read books in digital form, whereas 33% of students read both paper and digital books. Why is this information important? Meta Grosman (2013, p. 76) writes: "Numerous European documents about language teaching mention the need for digital literacy even though they are not concerned with digital literacy as a separate form of reading that establishes interaction with a changed text form. With regard to the growing number of digital forms of communication and young 'digital natives', it seems that questions related to electronic literacy will be of utmost importance for the 21st century readers." This points to the need to encourage reading in future educators and teachers precisely because they will be examples to children and students, encouraging their interest in reading. The value of reading a book, both in real and online form, gained its value during the time of the pandemic.

From the results it is evident that future kindergarten and primary school teachers are well-versed in using digital tools, platforms, and systems, but lack systematic knowledge about their implementation and the realisation of the educational content from the point of view of methodology. They single out a lack of interactivity as a major disadvantage of online classes. In the educational context, interactivity implies speaking, listening, and then reading and writing. What this lack of interactivity implies is that all language skills, and some in particular, are neglected.

Bearing in mind that there is no going back and that some positive organisational steps forward were taken as a consequence of the pandemic (for instance, hybrid classes make it possible for children that are ill to participate in class, fulfil tasks, and communicate with their teachers and classmates in real time), one has to consider

what the students' language competences are that are necessary for acquiring educational content in all the various areas.

In this study a relatively small sample showed us some interesting guidelines for the future. This study is also the authors' contribution to raising awareness on the need to master the skills of using digital tools and, even though they do not have all the answers, they believe that they have addressed important contemporary issues related not only to the said awareness but also related to language competences in various contexts. Bearing in mind everything that was obtained in the results, it is important to direct the educational process towards the adoption of the digital environment, the creation of digital content, and their use in teaching at a university. The traditional form of teaching that is mostly present at universities needs to be replaced by more modern and newer forms, which, among other things, include modern digital tools, encourage language competences and reading, and create a good foundation and knowledge that future teachers and educators will pass on to new generations.

References

Aladrović Slovaček, K., & Čosić, G. (2018). Jezična kompetentnost i osviještenost budućih učitelja [Language competence and language awareness of future Croatian teachers]. In D. Stolac & A. Vlastelić (Eds.), *Jezik kao predmet proučavanja i jezik kao predmet poučavanja*. Rijeka: Srednja Europa i HDPL.

HNOS (Hrvatski nacionalni obrazovni standard) – svrha i zadaća nastave hrvatskoga jezika u osnovnoj školi (2005). [Croatian National Curriculum Framework]. Zagreb: Ministarstvo znanosti, obrazovanja i sporta Republike Hrvatske. www.mzos.hr.

Dukić, D., & Mađarić, S. (2012). Online učenje u hrvatskom visokom obrazovanju [Online learning in Croatian tertiary education]. *Tehnički glasnik, 6*(1), 69–72.

Grosman, M. (2013). *U obranu čitanja: Čitatelji i književnost u 21. stoljeću.* In M. Mićanović (Ed.), Čitanje za školu i život. IV. Simpozij učitelja i nastavnika hrvatskoga jezika. Zbornik radova (pp. 76–90). Zagreb: AZOO.

Jukić, D. (2017). Tehnička pripremljenost i motiviranost studenata hrvatskih sveučilišta za *online* oblike nastave [Technical Preparedness and Motivation of Croatian University Students for Online Form of Learning]. *Život i škola: časopis za teoriju i praksu odgoja i obrazovanja*, *LXIII*(1), 96–104.

Kurikulum za nastavni predmet Hrvatski jezik za osnovne škole i gimnazije u Republici Hrvatskoj. (2019). [Curriculum for the Croatian language for elementary schools and high schools in the Republic of Croatia]. Zagreb: MZO.

Miljević-Riđički, R. & Pavličević-Franić, D. (2000). *Učitelji za učitelje* [Teachers for teachers]. Zagreb: UNICEF & IEP d.o.o.

Nastavni plan i program za osnovnu školu u Republici Hrvatskoj. (2006). [Curriculum and program for elementary school in the Republic of Croatia]. Zagreb: Ministarstvo znanosti, obrazovanja i sporta.

Odluka o obustavi izvođenja nastave u visokim učilištima, srednjim i osnovnim školama te redovnog rada u ustanovama predškolskog odgoja i obrazovanja i uspostavi nastave na daljinu. https://narodne-novine.nn.hr/clanci/sluzbeni/2020_03_29_670.html.

Pavličević-Franić, D., & Aladrović Slovaček, K. (2011) Utjecaj načina poučavanja na motivaciju i stav učenika prema hrvatskome jeziku kao nastavnome predmetu [Influence of teaching methods on pupil motivation and attitude towards Croatian as a school subject]. U *Napredak, 152*(2), 171–188.

PIRLS – izvješće o postignutim rezultatima iz čitanja. (2009). [PIRLS 2011 Results in Reading]. Zagreb: NCVVO.

PISA (2018). *Izvješće za Republiku Hrvatsku* [Country report for the Republic of Croatia]. Zagreb: NCVVO.

Spitzer, M. (2018). *Digitalna demencija* [Digital dementia]. Zagreb: Ljevak.