Croatian Teachers During COVID-19 Pandemic

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Abstract

The teacher plays a central role in every education system. In addition to imparting knowledge and perfecting students' skills, the teacher is also a role model on a socio-emotional, moral and speech level. However, its role has changed throughout history and depended on culture and lifestyle. Today, the education system around the world is facing a major test, and thus the role of the teacher as the central person of this process is being tested. Namely, the pandemic caused by the coronavirus switched teaching to the online form in 2020, to which some countries were less and some more ready. In the Republic of Croatia, distance learning was performed for three months in the first half of the year, and in the second half of the year, there are three models of teaching: distance, live and a combination of these two models. Given the experience of distance learning, on the one hand, there was less activity of students in completing tasks, poor understanding of the content of the material, the high workload of parents, but also many inconsistencies of teachers who in a concise time had to transfer their work entirely online (without prior education). On the other hand, it has been observed how much both students and parents are beginning to understand the importance of the teacher figure in the learning and teaching process and how difficult it is to replace teachers' living word with any form of online teaching. That is why this paper aims to examine teachers' attitudes about experiences with distance learning, and comparative analysis to determine the most common difficulties, challenges, and successes of this form of teaching by comparing it with classroom teaching. It is expected that the changes brought by distance learning will accelerate the digitalisation of the educational process, but also increase the understanding of the critical role of teachers as the centre of the educational process.

Keywords: *Teacher, Primary School, Teaching, Distance Learning, Educational System*

Introduction

The beginning of 2020 brought various changes globally and in societies worldwide. The outbreak of the SARS-COV-2 virus in the Far East countries and its spreading throughout the world has changed the global economy and affected the health and economic systems and, consequently, educational systems. The first case of illness appeared in the Republic of Croatia at the end of February, and in a month the whole country was in a so-called

'lockdown'. Kindergartens were closed, and classes in primary and secondary schools and the university were held online. Even though the educational system's digitalisation process has been quite successfully implemented for twenty years now, this was a 'step' to test this process's results. For lower primary school grades, classes were organised through a television channel, and students were getting their daily homework from teachers via several online or mobile tools. In higher primary school grades, classes were partly realised through various teachers' platforms, like Microsoft Teams, Yamer or video lessons, and a television channel. All interactive and evaluation tasks were checked online, and in this way, the progress of students was being monitored. Apart from those in the first four primary school grades, all students finished the last school year in this way. This school year, 2020/2021, started with contact learning but changes are probable in the course of the school year regarding the existing three-model situation: model a) contact learning, model b) a combination of contact and online learning and model c) online learning. Teachers are expected to have a high level of digital, social and emotional competencies to succeed in this challenging school year regarding the situation's complexity. That is precisely why this paper aims to examine the role of teachers in digital teaching and different ways in which they cope with online classes as a form of the new normality.

Theoretical framework: changing role of teachers
According to International Standard Classification of Occupations, teachers teach classes on all three educational levels: primary, secondary and university education, all who work with preschool children and organise different teaching activities (Cindrić, 1995). The teaching profession is the oldest and existed even before schools were organised as institutions. In every society, teachers were trusted and held in high esteem. The question that has occupied philosophers, pedagogists, psychologists and other experts since the ancient times is: What are the essential qualities of a teacher? Everybody's expectations are for a teacher to educate and bring up future generations according to the changing society's needs and demands. Apart from transferring knowledge and developing students' skills, a teacher is expected to be a role-model on a social-emotional, moral and speech level. With changing social circumstances, teachers' position in a society changes too, and fast and significant changes, scientific and technological progress change the traditional idea of the teacher's role. The function and the role of the teacher have not changed only concerning the teaching content but also about how their students see them, relate to them and how the teaching goals are reached (Đorđević & Đorđević, 1988; Armstrong, 2008, according to Ilić et al. 2012).

Teachers have a significant role in children's lives because they guide them, motivate them and give them knowledge and upbringing. Herein lies the reason why, at the beginning of the 20th century, teachers were mostly women who were expected to 'devote' themselves to the children they taught and not have a family of their own. With time, this condition changed, and teachers were educated in cities and then sent to smaller towns and villages where they were provided with adequate housing near the school and were responsible for children's education and upbringing in rural areas. Therefore, a teacher was, besides the priest and the doctor, the most important person in a village who often gave advice, encouraged reading, travelling and mutual understanding. From today's perspective, it was a good time to

be a teacher, and it is described in the realistic and early modernist novels (e. g., August Šenoa: Branka). However, the role of teachers is most important in the global world.

Today, a teacher has a crucial role in the education process and an important role in the future of humanity and society. It is the educational system's goal to bring up students who will be valuable members of the society contributing to its prosperity. Nowadays, teachers are expected to ensure a wholesome students' development, in all educational, curricular and extra-curricular activities, including the intellectual, moral, aesthetic, manual and physical component. Moreover, a teacher should be a person of trust, a coordinator, an advisor, an examiner, a friend and, on top of that, to have all the best qualities and abilities. Given the higher goal of creating a knowledge society, the following skills are necessary - proactivity, creativity, empathy, developing students' critical thinking and creativity to make them active members of contemporary society. A teacher is expected to become aware of his/her competencies and a student's well-being in education. Only a competent teacher who knows his/her competencies and continually strives to improve them is ready to make a student a capable and confident community member. Students often identify with their teacher to speak for teachers' importance in students' lives (Hercigonja, 2017). In creative and problem-solving tasks, a teacher is a mentor who guides and motivates his/her students in the education process. A high degree of independence expected from the teacher makes every student an individuum in this complex process and shows an educational system's maturity. Students' intrinsic motivation focuses on attention since it facilitates acquiring content that the teachers offer (Pavličević-Franić & Aladrović Slovaček, 2011).

The teaching profession is becoming increasingly complex and demands more and more knowledge and skills. Furthermore, a teacher is expected to show and develop his/her integrity, personal strength, professionalism and managing ability, and continually educate and improve as a professional. Being successful in his profession includes being familiar with new ways and teaching methods and showing creativity in and outside of the classroom. Using information communication technology must be essential in his/her work, developing students' competencies and knowledge. Implementing new teaching methods and e-education, a teacher as a manager, has many roles: organiser, planner, leader, associate, helper, coordinator, diagnostician, therapist and evaluator (Mirković, 2012). He/she has to develop their professional qualities through responsibly directing his/her personal growth in the process of lifelong learning. Teamwork (teaching) with other teachers and educating professionals working with the same students is important and good collaboration with their parents and other social partners.

At one moment, there was a sudden shift away from learning in the classroom towards online learning, unprecedented in humanity's history, which created dozens of millions of teachers and students who were forced, ready or not, to resume their teaching and learning through online platforms. Being a teacher in the modern world is a complex profession. Online classes are a new challenge, and teachers face it every day trying to adapt this new way of teaching to their subject and their students' needs to the best of their abilities. In order to reach the educational goals and outcomes of a particular subject and in the virtual surroundings, classes have to be well prepared and thoroughly planned. Both the teacher and the student have to be technically well-equipped. Even though online learning is a valuable tool in the modern-day practice and is used by both private and public organisations,

numerous research has shown that there are some problems associated with it: the negative attitude of teachers towards online learning, different teaching methods that have to be implemented, the cost of such learning and especially the fact that students are often not fond of it. Analyses have shown that mental and emotional obstacles often accompany online learning (Juutinen & Saariluoma, 2006). The environment of online learning is a lot more complex than the traditional way of learning. In order for a student to be successful in that environment, it is important that he can master three major (perception, emotions, self-regulation), i.e. nine specific personal and practical skills and abilities: cognitive abilities, Internet skills, self-confidence, beliefs, motivation, anxiety, self-observation, concentration and time management (Tsai, 2009). Since these skills are mostly the consequence of maturation and experience, we could conclude that online learning is more suitable for older students. With that in mind, it is necessary for a teacher to adjust his/her expectations from the students and to be aware of the fact that in that particular phase of development the teacher should encourage the development of the named skills and define online educational requirements in accordance with that (Yazdi & Zandkarimi, 2013).

All of the above points to the importance of the teaching profession and its challenges at the present time because, teachers eventually form students who will, in the course of the education process, prepare for their future, gain knowledge, develop skills and abilities and become human beings to actively shape a new society and change its values for the better. Therefore, this research aims to examine the role of teachers in this pandemic time and shed more light on the importance of this profession in the complex education process in which the global crisis is reflected, and our analysis is based on the Croatian education system. At the age of six, children start going to school, and they have one teacher for all subject except for foreign languages and optional subjects. In the fourth grade, the last in the first educational cycle, they have a Music teacher. In the second educational cycle, in the fifth grade, students have a different teacher for each subject, and there are more subjects. Primary school ends with the eighth grade, about the age of 14. After primary school, students choose a secondary school and the great majority, 80% of them, choose national gym programs which offer wide general knowledge and are a good foundation for continuing education at college or university. To enrol at a university or a professional study, students have to pass the State Matura exams on a national level for the obligatory subjects: Croatian language, mathematics and a foreign language, and, if required by the university some optional subjects. It is interesting to point out that the Republic of Croatia, along with some other European countries, has a very low primary school dropout rates. Students' success on all educational levels is everywhere, resulting from their teachers' effort and effective collaboration with students. The more successful this collaboration is, the better results are achieved. The results of Croatian students at international competitions, especially in the STEM subjects, are another example of how well they are taught and prepared by their teachers. This research will, therefore, demonstrate exactly how important teachers are in the whole process of education.

Problem areas

With regard to the research topic, the main goal was to examine teachers' attitudes towards their experiences with online classes and in accordance with this goal, the following research problems were defined:

- to examine teachers' attitudes towards the preparation and the quality of implementation of online learning
- to examine the most common difficulties, challenges and successes of online learning
- to examine differences in attitudes with regard to sex, type of teaching, years of work experience, type of school and group of subjects they teach

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

H1 – It is expected that teachers' preparedness and success in online classes will be in proportion with the duration of online learning since with time, they will get used to this way of teaching and recognise students' needs so the communication between students and teachers and parents and teachers will be better.

H2 – It is expected that most problems for teachers will arise from the fact that there will be a lack of quality communication with students and lack of control of the teaching process. It is also expected that teachers will accept the new way of teaching as a challenge and be successful in working with new tools and become more skilled using them.

H3 – It is expected that class teachers will be more satisfied in preparing and teaching online classes and that subject teachers will have more difficulties in realising the outcomes of their subjects, especially those subjects with a bigger number of lessons (Croatian language, mathematics, English language), subjects in which previously taught content is closely linked with learning new content (STEM subjects) or subjects whose content is quite comprehensive and for which it is necessary to single out key concepts like history or geography. Another expectation is that younger teachers will be more relaxed in applying new technology and more satisfied, as using information technology is closer to their generation.

Methodological research objectives

Sixty-nine examinees participated in the research – class and subject teachers in primary and secondary schools in the Republic of Croatia, who taught online classes for three months in the first half of the school year 2019/2020, and some for a shorter period in this school year 2020/2021 (N = 69). Basic demographic data were collected about the teachers and their attitudes towards their online classes. The obtained data show that most examinees were women (84 %), and the rest were men. Majority of them are employed in state schools (72%), followed by religious schools (19%) and private schools (9%). When it comes to their years of experience, most of them have up to 10 (59 %). About the same number are in class teaching (52%) and in subject teaching (48%) of who most teach languages (42%) and subjects related to science and technology (27%)—all database we put in the SPSS program for statistics. Kolmogorov Smirnov test showed that there is a significant difference in data ($p < 0,05$) and because of that we used non-parametric statistical test – Mann Whitney test for the testing difference to the gender and Kruskal Wallis test for testing other independent variables because we had more than three groups (the level of education, school type, working place) and maximum we had five groups (number of working years). For the research, a

questionnaire in a Google form about online learning that had taken place was created. It was distributed electronically to a number of e-addresses of class and subject teachers, and secondary school teachers. The questionnaire was open for seven days, starting on October 26th 2020. Participation in the research was voluntary and anonymous. The questionnaire consisted of short instructions at the beginning, six questions about basic socio-demographic characteristics and 19 questions of the open and closed type for which the examinees could offer one or more answers or determine the level of agreement with the statements on the Likert scale from 1 to 5. The questions were divided into a number of categories on different topics: preparedness for teaching online classes, implementing digital tools in presenting teaching content and communication with students; advantages and disadvantages of online learning and the comparison to classroom learning with regard to the level of stress and time invested into preparing teaching materials.

Results

This research aimed to examine teachers' attitudes according to preparing and quality of implementation of online teaching. 36.8 % of the teachers estimate that they were well prepared in online teaching, but 36.8 % of the teachers estimate that they were neither prepared nor unprepared for online teaching during the pandemic of COVID 19. 10,5 % of the teachers estimate that they were excellently prepared for online teaching, but on the other side, 15,8 % of the teachers estimate they were unprepared or in general unprepared (Figure 1).
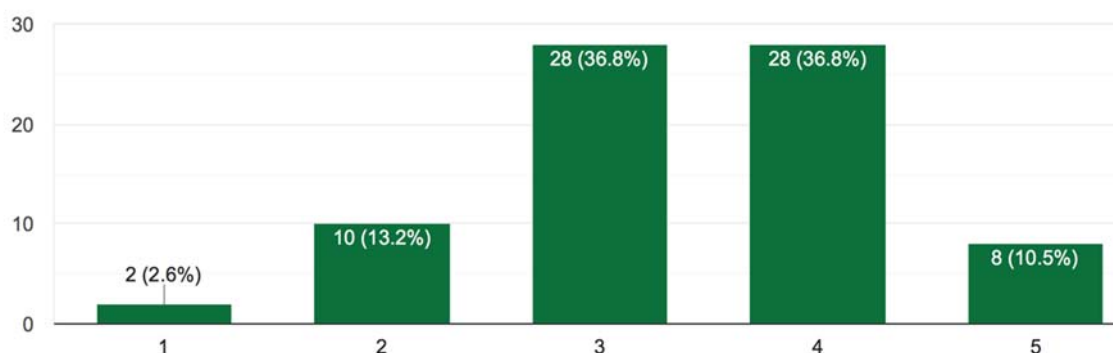

Figure 1. Attitudes of teachers in preparing for online teaching

In continuing, we asked teachers that describe their knowledge of digital technology. 48.7 % of teachers said that they are good in digital technologies, 15.8 said that they are excellent in using digital technology and 33 % said that they are neither good nor bad in using digital technology (Figure 2).
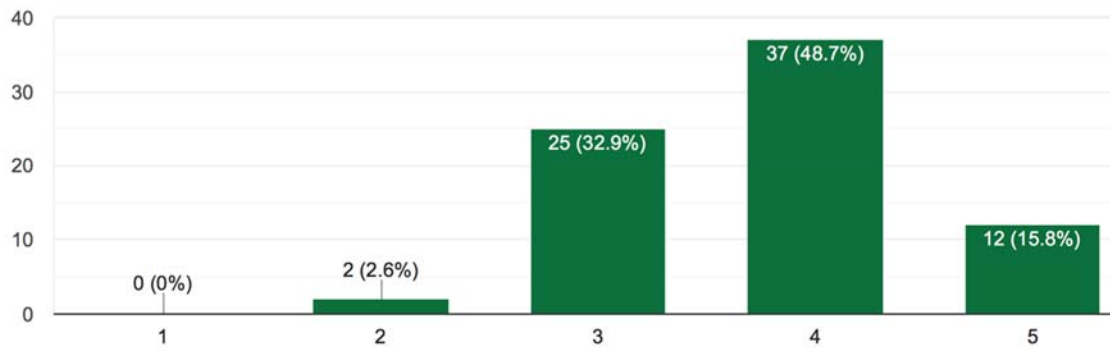
Figure 2. Describing of digital technologies by teachers

Teachers in their online teaching used many different software and tools as Loomen, Microsoft package, Kahoot, Yammer, Wardwall, Zoom, YouTube, Google forms and apps, Canva, e-sfera, Adobe, Viber, Gmail, Testmoz, Prezy, Sway, Weebly, Powtoon, Bookwidgets, Padlet, Thinglink, Genially, Vacaro, Mozabook, Mentimetar, Wizer.me. Some of them used for communication as Viber or gmail or Microsoft Teams and some of them used to prepare tests and tasks, and some of them used to teach and give new information in the subject. Most of these tools they also used for the presentation of their materials. Majority of teachers said that for them were very important to prepare video-lessons for their pupils because when they did it in vivo through Zoom or Teams or just put video-lesson in some tool, results of understanding these contents were better.

Table 1. Descriptive Statistics (N=69)

	Minimum	Maximum	Mean	St. deviation
gender	1	2	1,88	0,32
education level	1	3	1,98	0,36
working experiences	1	5	2,25	1,09
type of school	1	3	1,36	0,64
type of teaching	1	3	1,55	0,61
preparing for online teaching	1	5	3,43	0,87
knowledge about digital technologies	2	5	3,77	0,71
stress in online teaching	1	5	3,88	1,00
success of online teaching	1	5	2,53	0,84
communication with pupils	2	5	3,58	0,80
Estimates of working on the distance	1	5	3,65	0,93

The second aim of this research was to examine the most frequent difficulties, challenges and successes of distance learning – online teaching. Many teachers in the first plan of their difficulties put communication between them and their pupils. Very often, it was one-way communication without feedback and very often, it was frustrating. The second plan is communication with very rare parents, and parents were interested only in their children's final success. Also, teachers quote that they used much time to check their pupils' homework and noticed that some of them were not done form pupils, which was also a little bit frustrated. On the other side, they quoted that they used much time to prepare a lesson in

online form, lost time for organisation of lesson, very often pupils were there, but they did not cooperate with them. However, maybe the biggest problem was the evaluation of learning outcomes. 85,5 % of teachers said that online teaching took more time for preparing than normal teaching in teaching room in the school. 46.1 % said that they used more than 6 hours per day for distance learning – online teaching and 34.2 % of them said that they used 4-5 hours per day for preparing and teaching. Only 5 % of teachers said that they used less than 3 hours per day for online teaching and preparing. Moreover, one of the biggest problems was time because pupils sent your tasks all day and they had to be ready and in front of the computer very often. That has a big effect on stress.

On the other hand, teachers think that online teaching also had some advantages as using new technologies, learning about new technologies, new ways of communications, flexibility in working time and working place, and parents had to be included in teaching. Teachers also estimated their success in online teaching and 38,7 % of them think that they had very good online teaching, 14.7 % of them think that they had excellent online teaching, but 38.7 % of them think that they had neither good nor bad online teaching and 8 % think that their online teaching was not good, it was bad (Figure 3).
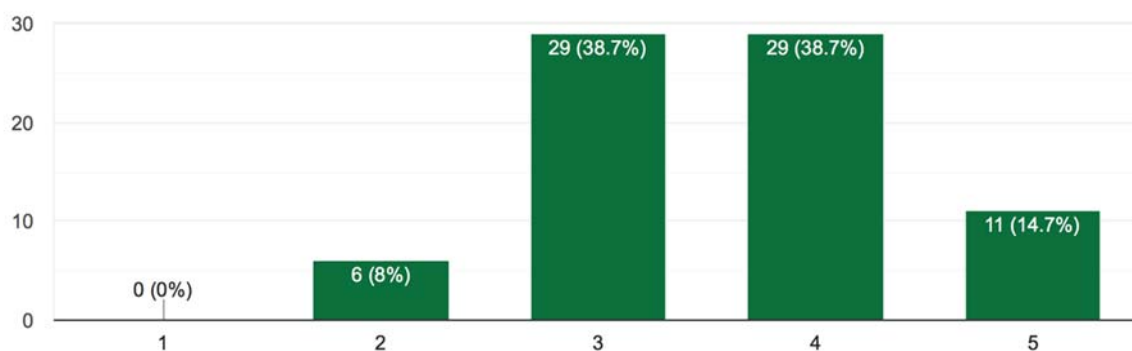

Figure 3. Estimation of teacher's success in online teaching

The third aim of these research was to examine whether we have statistically significant differences in gender, type of teaching group, years of work experience, level of education, and type of school in which they work. In evaluation, teachers estimated themselves with 3.48% on the Likert scale from 1 to 5 in preparation for the online teaching process. The knowledge about digital technologies they evaluated with 3.77 % on a Likert scale from 1 to 5. They recognise stress as one of the most common factors in the teaching process; generally, they feel stress in online teaching with 3,88 on Likert scale from 1 to 5, but in contact teaching, they feel less stress on Likert scale from 1 to 5 and evaluated them with 2.53 %. Probably, they learned to wear stress in an everyday school situation. In the online process, we cannot control anything, and some things become a source of stress, as homework, bad tasks, communication, and no cooperation. On a Likert scale from 1 to 5, they estimated success of online teaching with average grade 3,55, communication with pupils with 3,65 and general working online with 3,82.

There is no statistically significant difference in attitudes of teachers with regard to gender (p > 0,05) and the level of education (p > 0,05). Also, Kruskal Wallis test showed that there is no statistically significant difference in attitudes of teachers to the years of their work

experience (p > 0,05) and to the type of school where teachers work (p > 0,05). The statistic significant difference only we found to the working place – younger and older pupils. Some teachers work with younger children to the 4th grade, some of them are working with all pupils, and some are working with adults (from 5th to 8th grade). The statistic significant difference showed in the variable "success of online teaching" (p < 0,05). The most success was linked to the teachers who work with younger children (MS = 40,48), after that teacher that work with both groups (MS = 38,38) but the less success feel teachers who work with adult (MS = 24.38). Also, the statistically significant difference showed in the variable "assessment of online teaching" (p < 0,05). The most successful are teachers who work with younger children (MS = 38.35), after that teacher that works with both groups (MS = 31.50) but the least successful are teachers who work with adult (MS = 28.26) (Table 2).

Table 2. Results of the Kruskal Wallis tests

Variables		Mean Ranks
success of online teaching	1st – 4th grade teachers	40,48
	5th – 8th grade teachers	24,38
	combination group	38,38
assessment of online teaching	1st – 4th grade teachers	38,35
	5th – 8th grade teachers	28,26
	combination group	31,50

Discussion

Due to various changes in the world order, brought about by the appearance of the SARS-COV-2 virus, distance learning has become the only way to transmit educational content, not only in the Republic of Croatia but all over the world. Although it has been present for a long time as a way of teaching and learning new contents, with which teachers in the Croatian educational system are also familiar, this form of teaching has experienced its test at this time. Although many benefits of this form of teaching are discussed, the negative consequences are also known, as well as the weaker mastery of teaching contents presented "online". Research among teachers, conducted for this paper's purpose, showed that the advantages of distance learning are the use of new technologies, learning about new technologies, new ways of communication, the flexibility of working hours and workplace and parental involvement in the teaching process. Most teachers rate their success in distance learning as very good and excellent. However, many teachers cite communication between themselves and their students as the greatest difficulty in distance learning, often one-way communication without feedback. Although most teachers spent a lot more time preparing and conducting online classes, students were often there but did not cooperate with them. Although technology is playing an increasing role, effective face-to-face communication between teachers and students is still necessary and a key link for the student learning process. Some researchers used extensive academic monitoring data and found that the teacher-student relationship is the most important factor influencing student performance. Less effective communication between teachers and students also contributed to distance learning's biggest problem evaluating learning outcomes.

Teachers have recognised stress as one of the most common factors in the teaching process in this form of teaching since this process cannot be controlled and many things

become a source of stress and the COVID-19 pandemic testified to how we live in a time that breaks the boundaries of the ordinary, of what we know and what we all take for granted. Teachers face new challenges and need to be prepared for them. It has been shown that the digitalisation of education, taking into account its negative consequences, is necessary. That is why professional training of educational workers is needed. It is necessary to organise professional training on the topic of teleworking methodology. Online or mixed instruction may be good in specific circumstances, but not for all age students: the lower the students' age (the younger the students), the lower their independence. Therefore, long-term teaching is not the most suitable solution for primary school students in the long run, and especially not for primary school students (Yazdi & Zandkarimi, 2013). *Through all activities, the role of the teacher in the distance school is of great importance.*

Also, it is important to say that this situation will be continued and because of that we need new strategies for the educational system in general – how to organise the process of teaching during the pandemic situation – detailed plans, what is teacher's role, what have to do pupils and what we can expect from the parents. It is difficult to say that it is the same for all ages, but if we speak about young school children, we have to think about their emotional, social and thoughtful life and development. It is most important to cooperate with all educational subjects and be so careful in evaluating new knowledge when we have illness in families or isolations of children. We think that this period's consequences will be visible for some years, and we will be a successful society if we keep the healthy mind of our young generations.

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